# **NACOmatic**

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# Contact:

Doug Ranz 248-318-0011 NACOmatic@hotmail.com

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#### GENERAL INFORMATION

This Airport/Facility Directory is a Civil Flight Information Publication published and distributed every eight weeks by the National Aeronautical Charting Office, FAA, Department of Transportation, Silver Spring, Maryland 20910. It is designed for use with Aeronautical Charts covering the conterminous United States, Puerto Rico and the Virgin Islands.

This directory contains all open to the public airports, seaplane bases and heliports, military facilities, and selected private use facilities specifically requested by the Department of Defense (DoD) for which a DoD Instrument Approach Procedure has been published in the U.S. Terminal Procedures Publication. Additionally, this directory contains communications data, navigational facilities and certain special notices and procedures.

Military data contained within this publication is provided by the National Geospatial-Intelligence Agency and is intended to provide reference data for military and/or joint civil/military airports. Not all military data contained in this publication is applicable to civil users.

#### CORRECTIONS, COMMENTS, AND/OR PROCUREMENT

CRITICAL information such as equipment malfunction, abnormal field conditions, hazards to flight, etc., should be reported as soon as possible to the nearest FAA facility, either in person or by reverse charge telephone call.

#### FOR AIRPORT SUPPLEMENT REVISIONS FORM VISIT WEB SITE: http://nfdc.faa.gov/portal/airportchanges.do

FAA, Aeronautical Information Services, ATO-R, Rm. 626

800 Independence Ave., SW

Washington, DC 20591

Telephone 1-866-295-8236 Fax 202-267-5322

Email 9-ATOR-HO-AIS-AIRPORTCHANGES@FAA.GOV

NOTICE: Changes must be received by the Aeronautical Information Services as soon as possible but not later than the "cut-off" dates listed below to assure publication on the desired effective date.

	Airport Information	Airspace Information*
Effective Date	Cut-off date	Cut-off date
17 Dec 09	4 Nov 09	15 Oct 09
11 Feb 10	30 Dec 09	10 Dec 09
8 Apr 10	24 Feb 10	4 Feb 10
3 Jun 10	21 Apr 10	1 Apr 10
29 Jul 10	16 Jun 10	27 May 10
23 Sep 10	11 Aug 10	22 Jul 10

<sup>\*</sup>Including changes to preferred routes and graphic depictions on charts.

#### FOR CHARTING ERRORS CONTACT:

ı

FAA, National Aeronautical Charting Office, ATO-W

SSMC-4 Sta. #2335

1305 East West Highway

Silver Spring, MD 20910-3281

Telephone 1-800-626-3677

Email 9-AMC-Aerochart@faa.gov

Frequently asked questions (FAQs) are answered on our web site at <a href="www.naco.faa.gov">www.naco.faa.gov</a>. See the FAQs prior to contact via toll free number.

#### FOR PROCUREMENT CONTACT:

FAA, National Aeronautical Charting Office

Distribution Division, ATO-W

10201 Good Luck Road

Glenn Dale, MD 20769-9700

Online at www.naco.faa.gov

Email 9-AMC-Chartsales@faa.gov

Telephone 1-800-638-8972

Fax 301-436-6829

or any authorized FAA Chart Agent

New or Changed Information—To alert users of new information or changes to information from the previous issue, a vertical line will be portrayed in the outside margin and extending the full length of the new and/or revised data. This will not apply to the front cover or the airport/facility directory listing.

This Airport/Facility Directory comprises part of the following sections of the United States Aeronautical Information Publication (AIP): GEN, ENR and AD.

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#### **ABBREVIATIONS**

The following abbreviations/acronyms are those commonly used within this Directory. Other abbreviations/acronyms may be found in the Legend and are not duplicated below. The abbreviations presented are intended to represent grammatical variations of the basic form. (Example—''req'' may mean ''request'', ''requesting'', ''requested'', or ''requests'').

AAF	Army Air Field	byd	beyond
AB	Airbase	C	Commercial Circuit (Telephone)
abv	above	CGAF	Coast Guard Air Facility
ACC	Air Combat Command; Area Control	CGAS	Coast Guard Air Station
	Center	CIV	Civil
acft	aircraft	clsd	closed
ADCC	Air Defense Control Center	comd	command
AER	approach end rwy	CONUS	Continental United States
AFB	Air Force Base	CSTMS	Customs
AFHP	Air Force Heliport	ctc	contact
afld	airfield	ctl	control
AFOD	US Army Flight Operations Detachment	dalgt	daylight
AFRC	Armed Forces Reserve Center/Air Force	Dec	December
	Reserve Command	DIAP	DoD Instrument Approach Procedure
AFSS	Automated Flight Service Station	DoD	Department of Defense
AG	Agriculture	DSN	Defense Switching Network (Telephone)
A-GEAR	Arresting Gear	dsplcd	displaced
AGL	above ground level	durn	duration
AHP	Army heliport	eff	effective
ALS	Approach Light System	emerg	emergency
alt	altitude	EOR	End of Runway
AMC	Air Mobility Command	ETA	Estimated Time of Arrival
ANGS	Air National Guard Station	ETD	Estimated Time of Departure
apch	approach	exc	except
Apr	April	extd	extend
APU	Auxiliary Power Unit	FB0	fixed-base operator
ARB	Air Reserve Base	Feb	February
arpt	airport	fld	field
ARS	Air Reserve Station	FLIP	Flight Information Publication
AS	Air Station	flt	flight
ASDE-X	Airport Surface Detection Equipment—	flw	follow
	Model X	Fri	Friday
ASU	Aircraft Starting Unit	FSS	Flight Service Station
ATC	Air Traffic Control	GA	glide angle
Aug	August	GCA	Ground Controlled Approach
AUW	All Up Weight (gross weight)	GS	glide slope
avbl	available	haz	hazard
bcn	beacon	HQ	Headquarters
blo	below		

#### CONTINUED ON NEXT PAGE

#### CONTINUED FROM PRECEDING PAGE

hr hour non precision instrument ΙΔΡ Instrument Approach Procedure NS ABTMT Noise Abatement ICAC International Civil Aviation Organization NSTD nonstandard IFR Instrument Flight Rules ntc notice ILS Instrument Landing System obsn observation IM Inner Marker Oct October IMG Immigration OI F Outlying Field

incr increase onr operate, operator, operational

indet indefinite ons operations intensity OTS out of service ints invof in the vicinity of ovrn overrun

personnel and equipment working IMC Instrument Meteorological Conditions PAFW

lan nat pattern Jet Aircraft Starting Unit IASI p-line power line

JOAP Joint Oil Analysis Program **PMSV** Pilot-to-Metro Service IOSAC Joint Operational Support Airlift Center PΩI Petrol, Oils and Lubricants IRB Joint Reserve Base PPR prior permission required Jul July PRM Precision Runway Monitoring PTD

Jun June Pilot to Dispatcher

Κt Knots RAMCC Regional Air Movement Control Center

LAA Local Airport Advisory rea request LAHSO Land and Hold Short Operations rgt tfc right traffic RON Remain Overnight lhs nounds ldg landing rar require lighted rstd lgtd restricted

RSRS løts lights reduced same runway separation

LMM Compass locator at Middle Marker ILS rwv runway LOC Localizer Sat Saturday

LOM Compass locator at Outer Marker ILS SFLE Strategic Expeditionary Landing Field

limited Sen Itd September MACC Military Area Control Center SFA Single Frequency Approach

March efe Mar surface

SFRA MCAF Marine Corps Air Facility Special Flight Rules Area

SOAP MCALE Marine Corps Auxiliary Landing Field Spectrometric Oil Analysis Program

SOF Supervisor of Flying MCAS Marine Corps Air Station Marine Corps Base SPR MCB Seaplane Base

SP med medium sunrise SS METRO Pilot-to-Metro voice call sunset Mil military std standard min minute Sur Sunday MLS Microwave Landing System SVC service MM Middle Marker of ILS tfc traffic Mon Monday thld threshold Maintenance Period Thu Thursday tkf

MP MSI mean sea level take-off MSAW minimum safe altitude warning tmnrv temporary NAAS Naval Auxiliary Air Station tran transient NADC Naval Air Development Center Tue Tuesday NADER Naval Air Depot twr tower Naval Air Engineering Center NAEC twv taxiway

NAFS Naval Air Engineering Station UC **Under Construction** Naval Air Facility USA United States Army NAF NALCO Naval Air Logistics Control Office USAF United States Air Force USCG NALO Navy Air Logistics Office United States Coast Guard NALE Naval Auxiliary Landing Field USN United States Navy

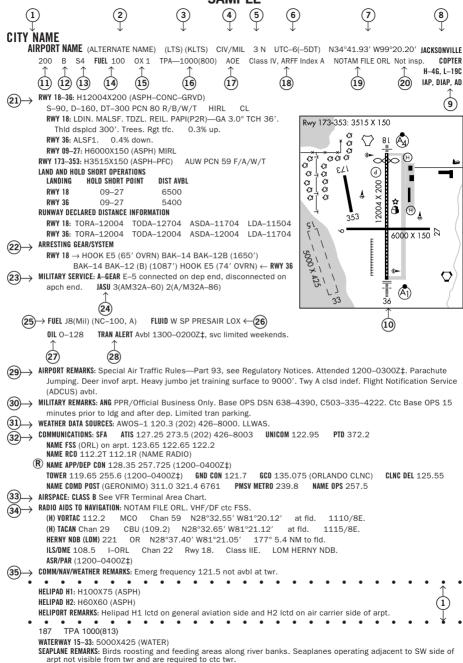
NAS Naval Air Station Defense Switching Network (telephone,

NAWC Naval Air Warfare Center formerly AUTOVON) NAWS Naval Air Weapons Station VFR Visual Flight Rules VIP night Very Important Person ngt

NOLF Naval Outlying Field VMC Visual Meteorological Conditions

Nov November Wed Wednesday wx weather

# SAMPI F



All bearings and radials are magnetic unless otherwise specified.
All mileages are nautical unless otherwise noted.
All times are Coordinated Universal Time (UTC) except as noted.
All elevations are in feet above/below Mean Sea Level (MSL) unless otherwise noted.
The horizontal reference datum of this publication is North American Datum of 1983 (NAD83), which for charting purposes is considered equivalent to World Geodetic System 1984 (WGS 84).

10 SKETC	H LEGEND
runways/landing areas	radio aids to navigation
Hard Surfaced	VORTAC
Metal Surface	VOR/DME NDB
Sod, Gravel, etc	TACAN TO NDB/DME
Light Plane,	MISCELLANEOUS AERONAUTICAL FEATURES
Closed	Airport Beacon
Helicopter Landings Area	Wind Cone
Displaced Threshold 0	Tetrahedron
Taxiway, Apron and Stopways	
ANGCELLANICOUG BACE AND CHITLIDAL	APPROACH LIGHTING SYSTEMS
MISCELLANEOUS BASE AND CULTURAL FEATURES	A dot "•" portrayed with approach lighting letter identifier indicates sequenced flashing lights (F) installed with the approach lighting
Buildings	system e.g. (A) Negative symbology, e.g., (A)  w indicates Pilot Controlled Lighting (PCL).
Power Lines	Runway Centerline Lighting
Fence	Approach Lighting System ALSF-2 I
Towers	Approach Lighting System ALSF-1
Tanks	Short Approach Lighting System SALS/SALSF.                   Simplified Short Approach Lighting System (SSALR) with RAII
Oil Well	System (SSALR) with RAIL
Smoke Stack	and SSALF)
5812 Obstruction	As System (MALSR) and RAIL
Controlling Obstruction	Lighting System (ODALS)
G & G.	(‡) Air Force Overrun
Trees	Visual Approach Slope Indicator with Standard Threshold Clearance provided
Populated Places	Pulsating Visual Approach Slope Indicator (PVASI)
Cuts and Fills Fill HITTITI	Visual Approach Slope Indicator with a threshold crossing height to accomodate long bodied or jumbo aircraft
Cliffs and Depressions	Tri-color Visual Approach Slope Indicator (TRCV)
Ditch	(V3) Approach Path Alignment Panel (APAP)
Hill	P Precision Approach Path Indicator (PAPI)

#### LEGEND

This directory is a listing of data on record with the FAA on all open to the public airports, military facilities and selected private use facilities specifically requested by the Department of Defense (DoD) for which a DoD Instrument Approach Procedure has been published in the U.S. Terminal Procedures Publication. Additionally this listing contains data for associated terminal control facilities, air route traffic control centers, and radio aids to navigation within the conterminous United States, Puerto Rico and the Virgin Islands. Joint civil/military and civil airports are listed alphabetically by state, associated city and airport name and cross-referenced by airport name. Military facilities are listed alphabetically by state and official airport name and cross-referenced by associated city name. Navaids, flight service stations and remote communication outlets that are associated with an airport, but with a different name, are listed alphabetically under their own name, as well as under the airport with which they are associated.

The listing of an open to the public airport in this directory merely indicates the airport operator's willingness to accommodate transient aircraft, and does not represent that the facility conforms with any Federal or local standards, or that it has been approved for use on the part of the general public. Military and private use facilities published in this directory are open to civil pilots only in an emergency or with prior permission. See Special Notice Section, Civil Use of Military Fields.

The information on obstructions is taken from reports submitted to the FAA. Obstruction data has not been verified in all cases. Pilots are cautioned that objects not indicated in this tabulation (or on the airports sketches and/or charts) may exist which can create a hazard to flight operation. Detailed specifics concerning services and facilities tabulated within this directory are contained in the Aeronautical Information Manual, Basic Flight Information and ATC Procedures.

The legend items that follow explain in detail the contents of this Directory and are keyed to the circled numbers on the sample on the preceding pages.

### (1) CITY/AIRPORT NAME

Civil and joint civil/military airports and facilities in this directory are listed alphabetically by state and associated city. Where the city name is different from the airport name the city name will appear on the line above the airport name. Airports with the same associated city name will be listed alphabetically by airport name and will be separated by a dashed rule line. A solid rule line will separate all others. FAA approved helipads and seaplane landing areas associated with a land airport will be separated by a dotted line. Military airports are listed alphabetically by state and official airport name.

# (2) ALTERNATE NAME

Alternate names, if any, will be shown in parentheses.

#### (3) LOCATION IDENTIFIER

The location identifier is a three or four character FAA code followed by a four-character ICAO code assigned to airports. ICAO codes will only be published at joint civil/military, and military facilities. If two different military codes are assigned, both codes will be shown with the primary operating agency's code listed first. These identifiers are used by ATC in lieu of the airport name in flight plans, flight strips and other written records and computer operations. Zeros will appear with a slash to differentiate them from the letter "O".

# (4) OPERATING AGENCY

Airports within this directory are classified into two categories, Military/Federal Government and Civil airports open to the general public, plus selected private use airports. The operating agency is shown for military, private use and joint civil/military airports. The operating agency is shown by an abbreviation as listed below. When an organization is a tenant, the abbreviation is enclosed in parenthesis. No classification indicates the airport is open to the general public with no

military tenant. Α US Army MC Marine Corps AFRC Air Force Reserve Command N Navv US Air Force Naval Air Facility ΔF NAF

Air National Guard Naval Air Station AR US Army Reserve NASA National Air and Space Administration Р ARNG US Army National Guard US Civil Airport Wherein Permit Covers CG US Coast Guard Use by Transient Military Aircraft CIV/MIL Joint Use Civil/Military PVT Private Use Only (Closed to the Public)

NAS

DND Department of National Defense Canada

### (5) AIRPORT LOCATION

ANG

Airport location is expressed as distance and direction from the center of the associated city in nautical miles and cardinal points, e.g., 4 NE.

### (6) TIME CONVERSION

Hours of operation of all facilities are expressed in Coordinated Universal Time (UTC) and shown as "Z" time. The directory indicates the number of hours to be subtracted from UTC to obtain local standard time and local daylight saving time UTC-5(-4DT). The symbol ‡ indicates that during periods of Daylight Saving Time effective hours will be one hour earlier than shown. In those areas where daylight saving time is not observed the (-4DT) and ‡ will not be shown. Daylight saving time is in effect from 0200 local time the second Sunday in March to 0200 local time the first Sunday in November. Canada and all U.S. Conterminous States observe daylight saving time except Arizona and Puerto Rico, and the Virgin Islands. If the state observes daylight saving time and the operating times are other than daylight saving times, the operating hours will include the dates, times and no ‡ symbol will be shown, i.e., April 15-Aug 31 0630-1700Z, Sep 1-Apr 14 0600-1700Z.

# **7** GEOGRAPHIC POSITION OF AIRPORT—AIRPORT REFERENCE POINT (ARP)

Positions are shown as hemisphere, degrees, minutes and hundredths of a minute and represent the approximate geometric center of all usable runway surfaces.

# 8 CHARTS

Charts refer to the Sectional Chart and Low and High Altitude Enroute Chart and panel on which the airport or facility is located. Helicopter Chart locations will be indicated as COPTER. IFR Gulf of Mexico West and IFR Gulf of Mexico Central will be depicted as GOMW and GOMC.

# (9) INSTRUMENT APPROACH PROCEDURES, AIRPORT DIAGRAMS

IAP indicates an airport for which a prescribed (Public Use) FAA Instrument Approach Procedure has been published. DIAP indicates an airport for which a prescribed DoD Instrument Approach Procedure has been published in the U.S. Terminal Procedures. See the Special Notice Section of this directory, Civil Use of Military Fields and the Aeronautical Information Manual 5–4–5 Instrument Approach Procedure Charts for additional information. AD indicates an airport for which an airport diagram has been published. Airport diagrams are located in the back of each A/FD volume alphabetically by associated city and airport name.

# 10 AIRPORT SKETCH

The airport sketch, when provided, depicts the airport and related topographical information as seen from the air and should be used in conjunction with the text. It is intended as a guide for pilots in VFR conditions. Symbology that is not self-explanatory will be reflected in the sketch legend. The airport sketch will be oriented with True North at the top. Airport sketches will be added incrementally.

# (11) ELEVATION

The highest point of an airport's usable runways measured in feet from mean sea level. When elevation is sea level it will be indicated as "00". When elevation is below sea level a minus "-" sign will precede the figure.

# (12) ROTATING LIGHT BEACON

B indicates rotating beacon is available. Rotating beacons operate sunset to sunrise unless otherwise indicated in the AIRPORT REMARKS or MILITARY REMARKS segment of the airport entry.

# (13) SERVICING—CIVIL

S1:	Minor airframe repairs.	S5:	Major airframe repairs.
S2:	Minor airframe and minor powerplant repairs.	S6:	Minor airframe and major powerplant repairs.
S3:	Major airframe and minor powerplant repairs.	S7:	Major powerplant repairs.
S4:	Major airframe and major powerplant repairs.	S8:	Minor powerplant repairs.
$\sim$			

# (14) FUEL

CODE	FUEL	CODE	FUEL
80	Grade 80 gasoline (Red)	B+	Jet B, Wide-cut, turbine fuel with FS-II*, FP**
100	Grade 100 gasoline (Green)		minus 50° C.
100LL	100LL gasoline (low lead) (Blue)	J4 (JP4)	(JP-4 military specification) FP** minus
115	Grade 115 gasoline (115/145 military		58° C.
	specification) (Purple)	J5 (JP5)	(JP-5 military specification) Kerosene with
Α	Jet A, Kerosene, without FS-II*, FP** minus		FS-11, FP** minus 46°C.
	40° C.	J8 (JP8)	(JP-8 military specification) Jet A-1, Kerosene
A+	Jet A, Kerosene, with FS-II*, FP** minus		with FS-II*, FP** minus 47°C.
	40°C.	J8+100	(JP-8 military specification) Jet A-1, Kerosene
A1	Jet A-1, Kerosene, without FS-II*, FP**		with FS-II*, FP** minus 47°C, with-fuel
	minus 47°C.		additive package that improves thermo
A1+	Jet A-1, Kerosene with FS-II*, FP** minus		stability characteristics of JP-8.
	47° C.	J	(Jet Fuel Type Unknown)
В	Jet B, Wide-cut, turbine fuel without FS-II*,	MOGAS	Automobile gasoline which is to be used
	FP** minus 50° C.		as aircraft fuel.

<sup>\*(</sup>Fuel System Icing Inhibitor)

NOTE: Certa

Certain automobile gasoline may be used in specific aircraft engines if a FAA supplemental type certificate has been obtained. Automobile gasoline, which is to be used in aircraft engines, will be identified as "MOGAS", however, the grade/type and other octane rating will not be published.

Data shown on fuel availability represents the most recent information the publisher has been able to acquire. Because of a variety of factors, the fuel listed may not always be obtainable by transient civil pilots. Confirmation of availability of fuel should be made directly with fuel suppliers at locations where refueling is planned.

# 15 OXYGEN—CIVIL

OX 1 High Pressure OX 3 High Pressure—Replacement Bottles
OX 2 Low Pressure OX 4 Low Pressure—Replacement Bottles

# 16 TRAFFIC PATTERN ALTITUDE

Traffic Pattern Altitude (TPA)—The first figure shown is TPA above mean sea level. The second figure in parentheses is TPA above airport elevation. Multiple TPA shall be shown as "TPA—See Remarks" and detailed information shall be shown in the Airport or Military Remarks Section. Traffic pattern data for USAF bases, USN facilities, and U.S. Army airports (including those on which ACC or U.S. Army is a tenant) that deviate from standard pattern altitudes shall be shown in Military Remarks.

<sup>\*\*(</sup>Freeze Point)

# (17) p

#### AIRPORT OF ENTRY. LANDING RIGHTS. AND CUSTOMS USER FEE AIRPORTS

U.S. CUSTOMS USER FEE AIRPORT—Private Aircraft operators are frequently required to pay the costs associated with customs processing.

AOE—Airport of Entry. A customs Airport of Entry where permission from U.S. Customs is not required to land. However, at least one hour advance notice of arrival is required.

LRA—Landing Rights Airport. Application for permission to land must be submitted in advance to U.S. Customs. At least one hour advance notice of arrival is required.

NOTE: Advance notice of arrival at both an AOE and LRA airport may be included in the flight plan when filed in Canada or Mexico. Where Flight Notification Service (ADCUS) is available the airport remark will indicate this service. This notice will also be treated as an application for permission to land in the case of an LRA. Although advance notice of arrival may be relayed to Customs through Mexico, Canada, and U.S. Communications facilities by flight plan, the aircraft operator is solely responsible for ensuring that Customs receives the notification. (See Customs, Immigration and Naturalization, Public Health and Agriculture Department requirements in the International Flight Information Manual for further details.)

US Customs Air and Sea Ports, Inspectors and Agents

Northeast Sector (New England and Atlantic States—ME to MD)	407-975-1740
Southeast Sector (Atlantic States—DC, WV, VA to FL)	407-975-1780
Central Sector (Interior of the US, including Gulf states—MS, AL, LA)	407-975-1760
Southwest East Sector (OK and eastern TX)	407-975-1840
Southwest West Sector (Western TX, NM and AZ)	407-975-1820
Pacific Sector (WA, OR, CA, HI and AK)	407-975-1800

### (18) CERTIFICATED AIRPORT (14 CFR PART 139)

Airports serving Department of Transportation certified carriers and certified under 14 CFR part 139 are indicated by the Class and the ARFF Index; e.g. Class I, ARFF Index A, which relates to the availability of crash, fire, rescue equipment. Class I airports can have an ARFF Index A through E, depending on the aircraft length and scheduled departures. Class II, III, and IV will always carry an Index A.

# 14 CFR PART 139 CERTIFICATED AIRPORTS AIRPORT CLASSIFICATIONS

Type of Air Carrier Operation	Class I	Class II	Class III	Class IV
Scheduled Air Carrier Aircraft with 31 or more passenger seats	Х			
Unscheduled Air Carrier Aircraft with 31 or more passengers seats	Х	Х		Х
Scheduled Air Carrier Aircraft with 10 to 30 passenger seats	Х	Х	Х	

# 14 CFR-PART 139 CERTIFICATED AIRPORTS

#### INDICES AND AIRCRAFT RESCUE AND FIRE FIGHTING EQUIPMENT REQUIREMENTS

Airport Index	Required No. Vehicles	Aircraft Length	Scheduled Departures	Agent + Water for Foam
А	1	<90'	≥1	500#DC or HALON 1211 or 450#DC + 100 gal H₂O
В	1 or 2	≥90′, <126′	≥5	Index A + 1500 gal H <sub>2</sub> O
		≥126′, <159′	<5	
С	2 or 3	≥126′, <159′	≥5	Index A + 3000 gal H <sub>2</sub> O
		≥159′, <200′	<5	
D	3	≥159′, <200′		Index A + 4000 gal H <sub>2</sub> O
		>200′	<5	
E	3	≥200′	≥5	Index A + 6000 gal H <sub>2</sub> O

<sup>&</sup>gt; Greater Than; < Less Than; ≥ Equal or Greater Than; ≤ Equal or Less Than; H<sub>2</sub>O-Water; DC-Dry Chemical.

NOTE: The listing of ARFF index does not necessarily assure coverage for non-air carrier operations or at other than prescribed times for air carrier. ARFF Index Ltd.—indicates ARFF coverage may or may not be available, for information contact airport manager prior to flight.

# 19 NOTAM SERVICE

All public use landing areas are provided NOTAM "D" (distant dissemination) and NOTAM "L" (local dissemination) service. Airport NOTAM file identifier is shown for individual airports, e.g. "NOTAM FILE IAD". See AIM, Basic Flight Information and

ATC Procedures for detailed description of NOTAM's. Current NOTAMs are available from Flight Service Stations at 1–800–WX–BRIEF. Real time Military NOTAMs are available using the DoD Internet NOTAM Distribution System (DINS) www.notams.jcs.mil.

# 20 FAA INSPECTION

All airports not inspected by FAA will be identified by the note: Not insp. This indicates that the airport information has been provided by the owner or operator of the field.

# **21** RUNWAY DATA

Runway information is shown on two lines. That information common to the entire runway is shown on the first line while information concerning the runway ends is shown on the second or following line. Runway direction, surface, length, width, weight bearing capacity, lighting, and slope, when available are shown for each runway. Multiple runways are shown with the longest runway first. Direction, length, width, and lighting are shown for sea-lanes. The full dimensions of helipads are shown, e.g., 50X150. Runway data that requires clarification will be placed in the remarks section.

#### RUNWAY DESIGNATION

Runways are normally numbered in relation to their magnetic orientation rounded off to the nearest 10 degrees. Parallel runways can be designated L (left)/R (right)/C (center). Runways may be designated as Ultralight or assault strips. Assault | strips are shown by magnetic bearing.

#### RUNWAY DIMENSIONS

Runway length and width are shown in feet. Length shown is runway end to end including displaced thresholds, but excluding those areas designed as overruns.

#### RUNWAY SURFACE AND LENGTH

Runway lengths prefixed by the letter "H" indicate that the runways are hard surfaced (concrete, asphalt, or part asphalt–concrete). If the runway length is not prefixed, the surface is sod, clay, etc. The runway surface composition is indicated in parentheses after runway length as follows:

(AFSC)—Aggregate friction seal coat	(GRVL)—Gravel, or cinders	(PSP)—Pierced steel plank
(ASPH)—Asphalt	(MATS)—Pierced steel planking,	(RFSC)—Rubberized friction seal coat
(CONC)—Concrete	landing mats, membranes	(TURF)—Turf
(DIRT)—Dirt	(PEM)—Part concrete, part asphalt	(TRTD)—Treated
(GRVD)—Grooved	(PFC)—Porous friction courses	(WC)—Wire combed

#### RIINWAY WEIGHT BEARING CAPACITY

Runway strength data shown in this publication is derived from available information and is a realistic estimate of capability at an average level of activity. It is not intended as a maximum allowable weight or as an operating limitation. Many airport pavements are capable of supporting limited operations with gross weights in excess of the published figures. Permissible operating weights, insofar as runway strengths are concerned, are a matter of agreement between the owner and user. When desiring to operate into any airport at weights in excess of those published in the publication, users should contact the airport management for permission. Runway strength figures are shown in thousand of pounds, with the last three figures being omitted. Add 000 to figure following S, D, 2S, 2T, AUW, SWL, etc., for gross weight capacity. A blank space following the letter designator is used to indicate the runway can sustain aircraft with this type landing gear, although definite runway weight bearing capacity figures are not available, e.g., S, D. Applicable codes for typical gear configurations with S=Single, D=Dual, T=Triple and Q=Quadruple:

CURRENT	NEW	NEW DESCRIPTION
S	S	Single wheel type landing gear (DC3), (C47), (F15), etc.
D	D	Dual wheel type landing gear (BE1900), (B737), (A319), etc.
T	D	Dual wheel type landing gear (P3, C9).
ST	28	Two single wheels in tandem type landing gear (C130).
TRT	2T	Two triple wheels in tandem type landing gear (C17), etc.
DT	2D	Two dual wheels in tandem type landing gear (B707), etc.
TT	2D	Two dual wheels in tandem type landing gear (B757,
		KC135).
SBTT	2D/D1	Two dual wheels in tandem/dual wheel body gear type
		landing gear (KC10).
None	2D/2D1	Two dual wheels in tandem/two dual wheels in tandem body
		gear type landing gear (A340–600).
DDT	2D/2D2	Two dual wheels in tandem/two dual wheels in double
		tandem body gear type landing gear (B747, E4).
TTT	3D	Three dual wheels in tandem type landing gear (B777), etc.
TT	D2	Dual wheel gear two struts per side main gear type landing
		gear (B52).
TDT	C5	Complex dual wheel and quadruple wheel combination
		landing gear (C5).

AUW—All up weight. Maximum weight bearing capacity for any aircraft irrespective of landing gear configuration.

SWL—Single Wheel Loading. (This includes information submitted in terms of Equivalent Single Wheel Loading (ESWL) and Single Isolated Wheel Loading).

PSI-Pounds per square inch. PSI is the actual figure expressing maximum pounds per square inch runway will support, e.g., (SWL 000/PSI 535).

Omission of weight bearing capacity indicates information unknown.

The ACN/PCN System is the ICAO standard method of reporting pavement strength for pavements with bearing strengths greater than 12.500 pounds. The Payement Classification Number (PCN) is established by an engineering assessment of the runway. The PCN is for use in conjunction with an Aircraft Classification Number (ACN). Consult the Aircraft Flight Manual, Flight Information Handbook, or other appropriate source for ACN tables or charts. Currently, ACN data may not be available for all aircraft. If an ACN table or chart is available, the ACN can be calculated by taking into account the aircraft weight, the pavement type, and the subgrade category. For runways that have been evaluated under the ACN/PCN system, the PCN will be shown as a five-part code (e.g. PCN 80 R/B/W/T), Details of the coded format are as follows:

- (1) The PCN NUMBER-The reported PCN indicates that an aircraft with an ACN equal or less than the reported PCN can operate on the pavement subject to any limitation on the tire pressure.
- (2) The type of pavement:
  - R Rigid
  - F Flexible
- (3) The pavement subgrade category:
  - A High
  - B Medium
  - C Low
  - D Ultra-low

- (4) The maximum tire pressure authorized for the pavement:
  - W High, no limit
  - X Medium, limited to 217 psi
  - Y Low, limited to 145 psi
- Z Very low, limited to 73 psi (5) Pavement evaluation method:
  - T Technical evaluation
  - U By experience of aircraft using the payement

NOTE: Prior permission from the airport controlling authority is required when the ACN of the aircraft exceeds the published PCN or aircraft tire pressure exceeds the published limits.

#### RUNWAY LIGHTING

Lights are in operation sunset to sunrise. Lighting available by prior arrangement only or operating part of the night and/or pilot controlled lighting with specific operating hours are indicated under airport or military remarks. At USN/USMC facilities lights are available only during airport hours of operation. Since obstructions are usually lighted, obstruction lighting is not included in this code. Unlighted obstructions on or surrounding an airport will be noted in airport or military remarks. Runway lights nonstandard (NSTD) are systems for which the light fixtures are not FAA approved L-800 series: color, intensity, or spacing does not meet FAA standards. Nonstandard runway lights, VASI, or any other system not listed below will be shown in airport remarks or military service. Temporary, emergency or limited runway edge lighting such as flares, smudge pots. lanterns or portable runway lights will also be shown in airport remarks or military service. Types of lighting are shown with the runway or runway end they serve.

NSTD-Light system fails to meet FAA standards.

LIRL-Low Intensity Runway Lights.

MIRL-Medium Intensity Runway Lights.

HIRL-High Intensity Runway Lights.

RAIL—Runway Alignment Indicator Lights.

REIL—Runway End Identifier Lights.

CL-Centerline Lights.

TDZL-Touchdown Zone Lights.

ODALS-Omni Directional Approach Lighting System.

AF OVRN-Air Force Overrun 1000' Standard

Approach Lighting System.

LDIN-Lead-In Lighting System.

MALS-Medium Intensity Approach Lighting System.

MALSF-Medium Intensity Approach Lighting System with Sequenced Flashing Lights.

MALSR-Medium Intensity Approach Lighting System with Runway Alignment Indicator Lights.

SALS-Short Approach Lighting System.

SALSF-Short Approach Lighting System with Sequenced Flashing Lights.

SSALS—Simplified Short Approach Lighting System.

SSALF—Simplified Short Approach Lighting System with Sequenced Flashing Lights.

SSALR—Simplified Short Approach Lighting System with Runway Alignment Indicator Lights.

ALSAF-High Intensity Approach Lighting System with Sequenced Flashing Lights.

ALSF1-High Intensity Approach Lighting System with Sequenced Flashing Lights, Category I, Configuration.

ALSF2-High Intensity Approach Lighting System with Se-

quenced Flashing Lights, Category II, Configuration. SF-Sequenced Flashing Lights.

OLS-Optical Landing System.

WAVE-OFF.

NOTE: Civil ALSF2 may be operated as SSALR during favorable weather conditions. When runway edge lights are positioned more than 10 feet from the edge of the usable runway surface a remark will be added in the "Remarks" portion of the airport entry. This is applicable to Air Force, Air National Guard and Air Force Reserve Bases, and those joint civil/military airfields on which they are tenants.

2-box SAVASI on right side of runway

#### DIRECTORY LEGEND

#### VISUAL GLIDESLOPE INDICATORS

-	APAP—A sys	tem of panels, which may or may not be lighted, used fo	r alignme	ent of approach path.
	PNIL	APAP on left side of runway	PNIR	APAP on right side of runway
F	PAPI—Precis	ion Approach Path Indicator		
	P2L	2-identical light units placed on left side of	P4L	4-identical light units placed on left side of
		runway		runway
	P2R	2-identical light units placed on right side of	P4R	4-identical light units placed on right side of
		runway		runway
F	PVASI—Pulsa	ating/steady burning visual approach slope indicator, no	rmally a	single light unit projecting two colors.
	PSIL	PVASI on left side of runway	PSIR	PVASI on right side of runway
	SAVASI—Sim	nplified Abbreviated Visual Approach Slope Indicator		

TRCV—Tri-color visual approach slope indicator, normally a single light unit projecting three colors.

2-box SAVASI on left side of runway

TRIL	TRCV on left side of runway	TRIR	TRCV on right side of runway
VASI—Visua	al Approach Slope Indicator		
V2L	2-box VASI on left side of runway	V6L	6-box VASI on left side of runway
V2R	2-box VASI on right side of runway	V6R	6-box VASI on right side of runway
V4L	4-box VASI on left side of runway	V12	12-box VASI on both sides of runway
V4R	4-box VASI on right side of runway	V16	16-box VASI on both sides of runway

NOTE: Approach slope angle and threshold crossing height will be shown when available; i.e., -GA 3.5° TCH 37'.

#### PILOT CONTROL OF AIRPORT LIGHTING

Key Mike	Function
7 times within 5 seconds	Highest intensity available
5 times within 5 seconds	Medium or lower intensity (Lower REIL or REIL-Off)
3 times within 5 seconds	Lowest intensity available
	(Lower REIL or REIL-Off)

Available systems will be indicated in the airport or military remarks, e.g., ACTIVATE HIRL Rwy 07–25, MALSR Rwy 07, and VASI Rwy 07—122.8.

Where the airport is not served by an instrument approach procedure and/or has an independent type system of different specification installed by the airport sponsor, descriptions of the type lights, method of control, and operating frequency will be explained in clear text. See AIM, "Basic Flight Information and ATC Procedures," for detailed description of pilot control of airport lighting.

When available, runway slope data will only be provided for those airports with an approved FAA instrument approach procedure. Runway slope will be shown only when it is 0.3 percent or greater. On runways less than 8000 feet, the direction of the slope up will be indicated, e.g., 0.3% up NW. On runways 8000 feet or greater, the slope will be shown (up or down) on the runway end line, e.g., RWY 13: 0.3% up., RWY 21: Pole. Rgt tfc. 0.4% down.

#### RUNWAY END DATA

Information pertaining to the runway approach end such as approach lights, touchdown zone lights, runway end identification lights, visual glideslope indicators, displaced thresholds, controlling obstruction, and right hand traffic pattern, will be shown on the specific runway end. "Rgt tfc"—Right traffic indicates right turns should be made on landing and takeoff for specified runway end.

#### LAND AND HOLD SHORT OPERATIONS (LAHSO)

LAHSO is an acronym for "Land and Hold Short Operations." These operations include landing and holding short of an intersection runway, an intersecting taxiway, or other predetermined points on the runway other than a runway or taxiway. Measured distance represents the available landing distance on the landing runway, in feet.

Specific questions regarding these distances should be referred to the air traffic manager of the facility concerned. The Aeronautical Information Manual contains specific details on hold–short operations and markings.

#### RUNWAY DECLARED DISTANCE INFORMATION

TORA—Take-off Run Available. The length of runway declared available and suitable for the ground run of an aeroplane take-off

TODA—Take-off Distance Available. The length of the take-off run available plus the length of the clearway, if provided.

ASDA—Accelerate-Stop Distance Available. The length of the take-off run available plus the length of the stopway, if provided. LDA—Landing Distance Available. The length of runway which is declared available and suitable for the ground run of an aeroplane landing.

# (22) ARRESTING GEAR/SYSTEMS

S2L

Arresting gear is shown as it is located on the runway. The a–gear distance from the end of the appropriate runway (or into the overrun) is indicated in parentheses. A–Gear which has a bi–direction capability and can be utilized for emergency approach end engagement is indicated by a (B). The direction of engaging device is indicated by an arrow. Up to 15 minutes advance notice may be required for rigging A–Gear for approach and engagement. Airport listing may show availability of other than US Systems. This information is provided for emergency requirements only. Refer to current aircraft operating manuals for specific engagement weight and speed criteria based on aircraft structural restrictions and arresting system limitations.

Following is a list of current systems referenced in this publication identified by both Air Force and Navy terminology:

BI-DIRECTIONAL CABLE (B)

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<u>TYPE</u> <u>DESCRIPTION</u>

BAK-9 Rotary friction brake.

BAK-12A Standard BAK-12 with 950 foot run out, 1-inch cable and 40,000 pound weight setting. Rotary

friction brake.

BAK-12B Extended BAK-12 with 1200 foot run, 1½ inch Cable and 50,000 pounds weight setting. Rotary

friction brake

E28 Rotary Hydraulic (Water Brake).
M21 Rotary Hydraulic (Water Brake) Mobile.

The following device is used in conjunction with some aircraft arresting systems:

BAK-14 A device that raises a hook cable out of a slot in the runway surface and is remotely positioned

for engagement by the tower on request. (In addition to personnel reaction time, the system

requires up to five seconds to fully raise the cable.)

H A device that raises a hook cable out of a slot in the runway surface and is remotely positioned

for engagement by the tower on request. (In addition to personnel reaction time, the system

requires up to one and one-half seconds to fully raise the cable.)

UNI-DIRECTIONAL CABLE

TYPE DESCRIPTION

MB60 Textile brake—an emergency one-time use, modular braking system employing the tearing of

specially woven textile straps to absorb the kinetic energy.

E5/E5-1/E5-3 Chain Type. At USN/USMC stations E-5 A-GEAR systems are rated, e.g., E-5 RATING-13R-1100

HW (DRY), 31L/R-1200 STD (WET). This rating is a function of the A-GEAR chain weight and length and is used to determine the maximum aircraft engaging speed. A dry rating applies to a stabilized surface (dry or wet) while a wet rating takes into account the amount (if any) of wet overrun that is not capable of withstanding the aircraft weight. These ratings are published under

Military Service.

FOREIGN CABLE

TYPE DESCRIPTION US EQUIVALENT

44B–3H Rotary Hydraulic) (Water Brake)

CHAG Chain E-5

UNI-DIRECTIONAL BARRIER

TYPE DESCRIPTION

MA-1A Web barrier between stanchions attached to a chain energy absorber.

BAK-15 Web barrier between stanchions attached to an energy absorber (water squeezer, rotary friction,

chain). Designed for wing engagement.

NOTE: Landing short of the runway threshold on a runway with a BAK–15 in the underrun is a significant hazard. The barrier in the down position still protrudes several inches above the underrun. Aircraft contact with the barrier short of the runway threshold can cause damage to the barrier and substantial damage to the aircraft.

OTHER

TYPE DESCRIPTION

EMAS Engineered Material Arresting System, located beyond the departure end of the runway, consisting of

high energy absorbing materials which will crush under the weight of an aircraft.

# 23 MILITARY SERVICE

Specific military services available at the airport are listed under this general heading. Remarks applicable to any military service are shown in the individual service listing.

# (24) JET AIRCRAFT STARTING UNITS (JASU)

The numeral preceding the type of unit indicates the number of units available. The absence of the numeral indicates ten or more units available. If the number of units is unknown, the number one will be shown. Absence of JASU designation indicates non-availability.

The following is a list of current JASU systems referenced in this publication:

USAF JASU (For variations in technical data, refer to T.O. 35–1–7.)

**ELECTRICAL STARTING UNITS:** 

A/M32A-86 AC: 115/200v, 3 phase, 90 kva, 0.8 pf, 4 wire

DC: 28v, 1500 amp, 72 kw (with TR pack)

MC-1A AC: 115/208v, 400 cycle, 3 phase, 37.5 kva, 0.8 pf, 108 amp, 4 wire

DC: 28v, 500 amp, 14 kw

MD-3 AC: 115/208v, 400 cycle, 3 phase, 60 kva, 0.75 pf, 4 wire

DC: 28v. 1500 amp. 45 kw. split bus

MD-3A AC: 115/208v, 400 cycle, 3 phase, 60 kva, 0.75 pf, 4 wire

DC: 28v, 1500 amp, 45 kw, split bus

MD-3M AC: 115/208v, 400 cycle, 3 phase, 60 kva, 0.75 pf, 4 wire

DC: 28v, 500 amp, 15 kw

MD-4 AC: 120/208v, 400 cycle, 3 phase, 62.5 kva, 0.8 pf, 175 amp, "WYE" neutral ground, 4 wire, 120v, 400 cycle, 3 phase, 62.5 kva, 0.8 pf, 303 amp, "DELTA" 3 wire, 120v, 400 cycle, 1 phase, 62.5

kva. 0.8 pf. 520 amp. 2 wire

AIR STARTING UNITS

AM32–95 150 + / - 5 lb/min (2055 + / - 68 cfm) at 51 + / - 2 psia AM32A–95 150 + / - 5 lb/min @ 49 + / - 2 psia (35 + / - 2 psig)

LASS 150 +/- 5 lb/min @ 49 +/- 2 psia

MA-1A 82 lb/min (1123 cfm) at 130° air inlet temp, 45 psia (min) air outlet press

MC-1 15 cfm, 3500 psia MC-1A 15 cfm, 3500 psia MC-2A 15 cfm, 200 psia

MC-11 8,000 cu in cap, 4000 psig, 15 cfm

COMBINED AIR AND ELECTRICAL STARTING UNITS:

AGPU AC: 115/200v, 400 cycle, 3 phase, 30 kw gen

DC: 28v, 700 amp

AIR: 60 lb/min @ 40 psig @ sea level

AM32A-60\* AIR: 120 + -4 lb/min (1644 + -55 cfm) at 49 + -2 psia

AC: 120/208v, 400 cycle, 3 phase, 75 kva, 0.75 pf, 4 wire, 120v, 1 phase, 25 kva

DC: 28v, 500 amp, 15 kw

AM32A-60A AIR: 150 + / - 5 lb/min (2055 + / - 68 cfm at 51 + / - psia AC: 120/208v, 400 cycle, 3 phase, 75 kva, 0.75 pf, 4 wire

DC: 28v. 200 amp. 5.6 kw

AIR: 130 lb/min, 50 psia AC: 120/208v, 400 cycle, 3 phase, 75 kva, 0.75 pf, 4 wire

DC: 28v, 200 amp, 5.6 kw

\*NOTE: During combined air and electrical loads, the pneumatic circuitry takes preference and will limit the amount of electrical power available.

USN JASU

AM32A-60B\*

ELECTRICAL STARTING UNITS:

NC-8A/A1 DC: 500 amp constant, 750 amp intermittent, 28v;

AC: 60 kva @ .8 pf, 115/200v, 3 phase, 400 Hz.

NC-10A/A1/B/C

DC: 750 amp constant, 1000 amp intermittent, 28v:

AC: 90 kva, 115/200v, 3 phase, 400 Hz.

AIR STARTING UNITS:

GTC-85/GTE-85 120 lbs/min @ 45 psi. MSU-200NAV/A/U47A-5 204 lbs/min @ 56 psia.

WELLS AIR START 180 lbs/min @ 75 psi or 120 lbs/min @ 45 psi. Simultaneous multiple start capability.

SYSTEM

COMBINED AIR AND ELECTRICAL STARTING UNITS:

NCPP-105/RCPT 180 lbs/min @ 75 psi or 120 lbs/min @ 45 psi. 700 amp, 28v DC. 120/208v, 400 Hz AC,

30 kva.

JASU (ARMY)

59B2-1B 28v, 7.5 kw, 280 amp.

OTHER JASL

ELECTRICAL STARTING UNITS (DND):

CE12 AC 115/200v, 140 kva, 400 Hz, 3 phase CE13 AC 115/200v, 60 kva, 400 Hz, 3 phase

CE14 AC/DC 1.15/200v, 140 kva, 400 Hz, 3 phase, 28vDC, 1500 amp
CE15 DC 22-35v, 500 amp continuous 1.100 amp intermittent
CE16 DC 22-35v, 500 amp continuous 1.100 amp intermittent soft start

AIR STARTING UNITS (DND):

CA2 ASA 45.5 psig, 116.4 lb/min COMBINED AIR AND ELECTRICAL STARTING UNITS (DND)

CEA1 AC 120/208v, 60 kva, 400 Hz, 3 phase DC 28v, 75 amp

AIR 112.5 lb/min, 47 psig

ELECTRICAL STARTING UNITS (OTHER)

C-26 28v 45kw 115-200v 15kw 380-800 Hz 1 phase 2 wire

C-26-B, C-26-C 28v 45kw: Split Bus: 115-200v 15kw 380-800 Hz 1 phase 2 wire

E3 DC 28v/10kw

AIR STARTING UNITS (OTHER):

A4 40 psi/2 lb/sec (LPAS Mk12, Mk12L, Mk12A, Mk1, Mk2B)

MA-1 150 Air HP, 115 lb/min 50 psia MA-2 250 Air HP, 150 lb/min 75 psia

CARTRIDGE:

MXU-4A USAF



Fuel available through US Military Base supply, DESC Into-Plane Contracts and/or reciprocal agreement is listed first and is followed by (Mil). At commercial airports where Into-Plane contracts are in place, the name of the refueling agent is shown. Military fuel should be used first if it is available. When military fuel cannot be obtained but Into-Plane contract fuel is available, Government aircraft must refuel with the contract fuel and applicable refueling agent to avoid any breach in contract terms and conditions. Fuel not available through the above is shown preceded by NC (no contract). When fuel is obtained from NC sources, local purchase procedures must be followed. The US Military Aircraft Identaplates DD Form 1896 (Jet Fuel), DD Form 1897 (Avgas) and AF Form 1245 (Avgas) are used at military installations only. The US Government Aviation Into-Plane Reimbursement (AIR) Card (currently issued by AVCARD) is the instrument to be used to obtain fuel under a DESC Into-Plane Contract and for NC purchases if the refueling agent at the commercial airport accepts the AVCARD. A current list of contract fuel locations is available online at <a href="https://www.desc.dla.mil/Static/ProductsAndServices.asp">www.desc.dla.mil/Static/ProductsAndServices.asp</a>; click on the Commercial Airports button.

See legend item 14 for fuel code and description.

# 26 SUPPORTING FLUIDS AND SYSTEMS—MILITARY

CODE

ADI Anti-Detonation Injection Fluid—Reciprocating Engine Aircraft.

W Water Thrust Augmentation—Jet Aircraft.

WAI Water-Alcohol Injection Type, Thrust Augmentation—Jet Aircraft.

SP Single Point Refueling.

PRESAIR Air Compressors rated 3,000 PSI or more.

De-Ice Anti-icing/De-icing/Defrosting Fluid (MIL-A-8243).

OXYGEN:

LPOX Low pressure oxygen servicing.
HPOX High pressure oxygen servicing.
LHOX Low and high pressure oxygen servicing.

LOX Liquid oxygen servicing.

OXRB Oxygen replacement bottles. (Maintained primarily at Naval stations for use in acft where oxygen can be

replenished only by replacement of cylinders.)

OX Indicates oxygen servicing when type of servicing is unknown.

NOTE: Combinations of above items is used to indicate complete oxygen servicing available;

LHOXRB Low and high pressure oxygen servicing and replacement bottles;

LPOXRB Low pressure oxygen replacement bottles only, etc.

NOTE: Aircraft will be serviced with oxygen procured under military specifications only. Aircraft will not be serviced with medical oxygen.

#### NITROGEN:

LPNIT — Low pressure nitrogen servicing.

HPNIT — High pressure nitrogen servicing.

LHNIT — Low and high pressure nitrogen servicing.

# **27** OIL—MILITARY

US AVIATION OILS (MIL SPECS):

CODE GRADE, TYPE 0 - 1131065, Reciprocating Engine Oil (MIL-L-6082) 0 - 1171100, Reciprocating Engine Oil (MIL-L-6082) 0 - 117 +1100, 0-117 plus cyclohexanone (MIL-L-6082) 1065, (Dispersant), Reciprocating Engine Oil (MIL-L-22851 Type III) 0 - 1230 - 1281100, (Dispersant), Reciprocating Engine Oil (MIL-L-22851 Type II) 0 - 1321005, Jet Engine Oil (MIL-L-6081) 0 - 1331010, Jet Engine Oil (MIL-L-6081) 0 - 147None, MIL-L-6085A Lubricating Oil, Instrument, Synthetic 0 - 148None, MIL-L-7808 (Synthetic Base) Turbine Engine Oil 0-149 None, Aircraft Turbine Engine Synthetic, 7.5c St 0 - 155None, MIL-L-6086C, Aircraft, Medium Grade

0–156 None, MIL–L–23699 (Synthetic Base), Turboprop and Turboshaft Engines

JOAP/SOAP Joint Oil Analysis Program. JOAP support is furnished during normal duty hours, other times on request.

(JOAP and SOAP programs provide essentially the same service, JOAP is now the standard joint service

supported program.)

# 28 TRANSIENT ALERT (TRAN ALERT)—MILITARY

Tran Alert service is considered to include all services required for normal aircraft turn-around, e.g., servicing (fuel, oil, oxygen, etc.), debriefing to determine requirements for maintenance, minor maintenance, inspection and parking assistance of transient aircraft. Drag chute repack, specialized maintenance, or extensive repairs will be provided within the capabilities and priorities of the base. Delays can be anticipated after normal duty hours/holidays/weekends regardless of the hours of transient maintenance operation. Pilots should not expect aircraft to be serviced for TURN-AROUNDS during time periods when servicing or maintenance manpower is not available. In the case of airports not operated exclusively by US military, the servicing indicated by the remarks will not always be available for US military

aircraft. When transient alert services are not shown, facilities are unknown. NO PRIORITY BASIS—means that transient alert services will be provided only after all the requirements for mission/tactical assigned aircraft have been accomplished.

# (29) AIRPORT REMARKS

The Attendance Schedule is the months, days and hours the airport is actually attended. Airport attendance does not mean watchman duties or telephone accessibility, but rather an attendant or operator on duty to provide at least minimum services (e.g., repairs, fuel, transportation).

Airport Remarks have been grouped in order of applicability. Airport remarks are limited to those items of information that are determined essential for operational use, i.e., conditions of a permanent or indefinite nature and conditions that will remain in effect for more than 30 days concerning aeronautical facilities, services, maintenance available, procedures or hazards, knowledge of which is essential for safe and efficient operation of aircraft. Information concerning permanent closing of a runway or taxiway will not be shown. A note "See Special Notices" shall be applied within this remarks section when a special notice applicable to the entry is contained in the Special Notices section of this publication.

Parachute Jumping indicates parachute jumping areas associated with the airport. See Parachute Jumping Area section of this publication for additional Information.

Landing Fee indicates landing charges for private or non-revenue producing aircraft. In addition, fees may be charged for planes that remain over a couple of hours and buy no services, or at major airline terminals for all aircraft.

Note: Unless otherwise stated, remarks including runway ends refer to the runway's approach end.

# **30** MILITARY REMARKS

Military Remarks published at a joint Civil/Military facility are remarks that are applicable to the Military. At Military Facilities all remarks will be published under the heading Military Remarks. Remarks contained in this section may not be applicable to civil users. The first group of remarks is applicable to the primary operator of the airport. Remarks applicable to a tenant on the airport are shown preceded by the tenant organization, i.e., (A) (AF) (N) (ANG), etc. Military airports operate 24 hours unless otherwise specified. Airport operating hours are listed first (airport operating hours will only be listed if they are different than the airport attended hours or if the attended hours are unavailable) followed by pertinent remarks in order of applicability. Remarks will include information on restrictions, hazards, traffic pattern, noise abatement, customs/agriculture/immigration, and miscellaneous information applicable to the Military.

#### Type of restrictions:

CLOSED: When designated closed, the airport is restricted from use by all aircraft unless stated otherwise. Any closure applying to specific type of aircraft or operation will be so stated. USN/USMC/USAF airports are considered closed during non-operating hours. Closed airports may be utilized during an emergency provided there is a safe landing area.

OFFICIAL BUSINESS ONLY: The airfield is closed to all transient military aircraft for obtaining routine services such as fueling, passenger drop off or pickup, practice approaches, parking, etc. The airfield may be used by aircraws and aircraft if official government business (including civilian) must be conducted on or near the airfield and prior permission is received from the airfield manager.

AF OFFICIAL BUSINESS ONLY OR NAVY OFFICIAL BUSINESS ONLY: Indicates that the restriction applies only to service indicated.

PRIOR PERMISSION REQUIRED (PPR): Airport is closed to transient aircraft unless approval for operation is obtained from the appropriate commander through Chief, Airfield Management or Airfield Operations Officer. Official Business or PPR does not preclude the use of US Military airports as an alternate for IFR flights. If a non-US military airport is used as a weather alternate and requires a PPR, the PPR must be requested and confirmed before the flight departs. The purpose of PPR is to control volume and flow of traffic rather than to prohibit it. Prior permission is required for all aircraft requiring transient alert service outside the published transient alert duty hours. All aircraft carrying hazardous materials must obtain prior permission as outlined in AFJI 11–204, AR 95–27, OPNAVINST 3710.7.

Note: OFFICIAL BUSINESS ONLY AND PPR restrictions are not applicable to Special Air Mission (SAM) or Special Air Resource (SPAR) aircraft providing person or persons on aboard are designated Code 6 or higher as explained in AFJMAN 11–213, AR 95–11, OPNAVINST 3722–8J. Official Business Only or PPR do not preclude the use of the airport as an alternate for IFR flights.

# ③1) WEATHER DATA SOURCES

Weather data sources will be listed alphabetically followed by their assigned frequencies and/or telephone number and hours of operation.

ASOS—Automated Surface Observing System. Reports the same as an AWOS-3 plus precipitation identification and intensity, and freezing rain occurrence (future enhancement).

AWOS-Automated Weather Observing System

AWOS-A—reports altimeter setting (all other information is advisory only).

AWOS-1—reports altimeter setting, wind data and usually temperature, dewpoint and density altitude.

AWOS-2-reports the same as AWOS-1 plus visibility.

AWOS-3—reports the same as AWOS-1 plus visibility and cloud/ceiling data.

See AIM, Basic Flight Information and ATC Procedures for detailed description of AWOS.

HIWAS—See RADIO AIDS TO NAVIGATION

LAWRS—Limited Aviation Weather Reporting Station where observers report cloud height, weather, obstructions to vision, temperature and dewpoint (in most cases), surface wind, altimeter and pertinent remarks.

LLWAS—indicates a Low Level Wind Shear Alert System consisting of a center field and several field perimeter anemometers. SAWRS—identifies airports that have a Supplemental Aviation Weather Reporting Station available to pilots for current weather information.

SWSL—Supplemental Weather Service Location providing current local weather information via radio and telephone.

TDWR—indicates airports that have Terminal Doppler Weather Radar.

WSP—indicates airports that have Weather System Processor.

When the automated weather source is broadcast over an associated airport NAVAID frequency (see NAVAID line), it shall be indicated by a bold ASOS, AWOS, or HIWAS followed by the frequency, identifier and phone number, if available.



Airport terminal control facilities and radio communications associated with the airport shall be shown. When the call sign is not the same as the airport name the call sign will be shown. Frequencies shall normally be shown in descending order with the primary frequency listed first. Frequencies will be listed, together with sectorization indicated by outbound radials, and hours of operation. Communications will be listed in sequence as follows:

Single Frequency Approach (SFA), Common Traffic Advisory Frequency (CTAF), Automatic Terminal Information Service (ATIS) and Aeronautical Advisory Stations (UNICOM) or (AUNICOM) along with their frequency is shown, where available, on the line following the heading "COMMUNICATIONS." When the CTAF and UNICOM frequencies are the same, the frequency will be shown as CTAF/UNICOM 122.8.

The FSS telephone nationwide is toll free 1–800–WX–BRIEF (1–800–992–7433). When the FSS is located on the field it will be indicated as "on arpt". Frequencies available at the FSS will follow in descending order. Remote Communications Outlet (RCO) providing service to the airport followed by the frequency and FSS RADIO name will be shown when available.

FSS's provide information on airport conditions, radio aids and other facilities, and process flight plans. Airport Advisory Service (AAS) is provided on the CTAF by FSS's for select non-tower airports or airports where the tower is not in operation.

(See AIM, Para 4-1-9 Traffic Advisory Practices at Airports Without Operating Control Towers or AC 90-42C.)

Aviation weather briefing service is provided by FSS specialists. Flight and weather briefing services are also available by calling the telephone numbers listed.

Remote Communications Outlet (RCO)—An unmanned air/ground communications facility that is remotely controlled and provides UHF or VHF communications capability to extend the service range of an FSS.

Civil Communications Frequencies-Civil communications frequencies used in the FSS air/ground system are operated on 122.0, 122.2, 123.6; emergency 121.5; plus receive-only on 122.1.

- a. 122.0 is assigned as the Enroute Flight Advisory Service frequency at selected FSS RADIO outlets.
- b. 122.2 is assigned as a common enroute frequency.
- c. 123.6 is assigned as the airport advisory frequency at select non-tower locations. At airports with a tower, FSS may provide airport advisories on the tower frequency when tower is closed.
- d. 122.1 is the primary receive-only frequency at VOR's.
- e. Some FSS's are assigned 50 kHz frequencies in the 122–126 MHz band (eg. 122.45). Pilots using the FSS A/G system should refer to this directory or appropriate charts to determine frequencies available at the FSS or remoted facility through which they wish to communicate.

Emergency frequency 121.5 and 243.0 are available at all Flight Service Stations, most Towers, Approach Control and RADAR facilities.

Frequencies published followed by the letter "T" or "R", indicate that the facility will only transmit or receive respectively on that frequency. All radio aids to navigation (NAVAID) frequencies are transmit only.

#### TERMINAL SERVICES

SFA—Single Frequency Approach.

CTAF—A program designed to get all vehicles and aircraft at airports without an operating control tower on a common frequency.

ATIS—A continuous broadcast of recorded non-control information in selected terminal areas.

D-ATIS—Digital ATIS provides ATIS information in text form outside the standard reception range of conventional ATIS via landline & data link communications and voice message within range of existing transmitters.

AUNICOM—Automated UNICOM is a computerized, command response system that provides automated weather, radio check capability and airport advisory information selected from an automated menu by microphone clicks.

UNICOM—A non-government air/ground radio communications facility which may provide airport information.

PTD—Pilot to Dispatcher.

APP CON—Approach Control. The symbol (R) indicates radar approach control.

TOWER—Control tower.

GCA—Ground Control Approach System.

GND CON—Ground Control

GCO—Ground Communication Outlet—An unstaffed, remotely controlled, ground/ground communications facility. Pilots at uncontrolled airports may contact ATC and FSS via VHF to a telephone connection to obtain an instrument clearance or close a VFR or IFR flight plan. They may also get an updated weather briefing prior to takeoff. Pilots will use four "key clicks" on the

VHF radio to contact the appropriate ATC facility or six "key clicks" to contact the FSS. The GCO system is intended to be used only on the ground.

DEP CON—Departure Control. The symbol R indicates radar departure control.

CLNC DEL-Clearance Delivery.

PRE TAXI CLNC-Pre taxi clearance.

VFR ADVSY SVC—VFR Advisory Service. Service provided by Non-Radar Approach Control.

Advisory Service for VFR aircraft (upon a workload basis) ctc APP CON.

COMD POST—Command Post followed by the operator call sign in parenthesis.

PMSV—Pilot-to-Metro Service call sign, frequency and hours of operation, when full service is other than continuous.

PMSV installations at which weather observation service is available shall be indicated, following the frequency and/or

hours of operation as "Wx obsn svc 1900–0000Z‡" or "other times" may be used when no specific time is given. PMSV facilities manned by forecasters are considered "Full Service". PMSV facilities manned by weather observers are listed as "Limited Service".

OPS—Operations followed by the operator call sign in parenthesis.

CON

RANGE

FLT FLW-Flight Following

MEDIVAC

NOTE: Communication frequencies followed by the letter "X" indicate frequency available on request.

# 33 AIRSPACE

Information concerning Class B, C, and part-time D and E surface area airspace shall be published with effective times. Class D and E surface area airspace that is continuous as established by Rulemaking Docket will not be shown.

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 ${\tt CLASS\ B--Radar\ Sequencing\ and\ Separation\ Service\ for\ all\ aircraft\ in\ CLASS\ B\ airspace.}$ 

CLASS C—Separation between IFR and VFR aircraft and sequencing of VFR arrivals to the primary airport.

TRSA—Radar Sequencing and Separation Service for participating VFR Aircraft within a Terminal Radar Service Area.

Class C, D, and E airspace described in this publication is that airspace usually consisting of a 5 NM radius core surface area that begins at the surface and extends upward to an altitude above the airport elevation (charted in MSL for Class C and Class D). Class E surface airspace normally extends from the surface up to but not including the overlying controlled airspace.

When part-time Class C or Class D airspace defaults to Class E, the core surface area becomes Class E. This will be formatted as:

AIRSPACE: CLASS C svc "times" ctc APP CON other times CLASS E:

0

AIRSPACE: CLASS D svc "times" other times CLASS E.

When a part-time Class C, Class D or Class E surface area defaults to Class G, the core surface area becomes Class G up to, but not including, the overlying controlled airspace. Normally, the overlying controlled airspace is Class E airspace beginning at either 700' or 1200' AGL. This will be formatted as:

AIRSPACE: CLASS C svc "times" ctc APP CON other times CLASS G, with CLASS E 700' (or 1200') AGL & abv:

0

AIRSPACE: CLASS D svc "times" other times CLASS G with CLASS E 700' (or 1200') AGL & abv:

or

AIRSPACE: CLASS E svc "times" other times CLASS G with CLASS E 700' (or 1200') AGL & abv.

NOTE: AIRSPACE SVC "TIMES" INCLUDE ALL ASSOCIATED ARRIVAL EXTENSIONS. Surface area arrival extensions for instrument approach procedures become part of the primary core surface area. These extensions may be either Class D or Class E airspace and are effective concurrent with the times of the primary core surface area. For example, when a part-time Class C, Class D or Class E surface area defaults to Class G, the associated arrival extensions will default to Class G at the same time. When a part-time Class C or Class D surface area defaults to Class E, the arrival extensions will remain in effect as Class E airspace.

NOTE: CLASS E AIRSPACE EXTENDING UPWARD FROM 700 FEET OR MORE ABOVE THE SURFACE, DESIGNATED IN CONJUNCTION WITH AN AIRPORT WITH AN APPROVED INSTRUMENT PROCEDURE.

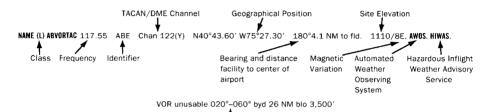
Class E 700′ AGL (shown as magenta vignette on sectional charts) and 1200′ AGL (blue vignette) areas are designated when necessary to provide controlled airspace for transitioning to/from the terminal and enroute environments. Unless otherwise specified, these 700′/1200′ AGL Class E airspace areas remain in effect continuously, regardless of airport operating hours or surface area status. These transition areas should not be confused with surface areas or arrival extensions.

(See Chapter 3, AIRSPACE, in the Aeronautical Information Manual for further details)



The Airport/Facility Directory lists, by facility name, all Radio Aids to Navigation that appear on National Aeronautical Charting Office Visual or IFR Aeronautical Charts and those upon which the FAA has approved an Instrument Approach Procedure, with exception of selected TACANs. Military TACAN information will be published for Military facilities contained in this publication. All VOR, VORTAC, TACAN, ILS and MLS equipment in the National Airspace System has an automatic monitoring and shutdown feature in the event of malfunction. Unmonitored, as used in this publication, for any navigational aid, means that monitoring personnel cannot observe the malfunction or shutdown signal. The NAVAID NOTAM file identifier will be shown as "NOTAM FILE IAD" and will be listed on the Radio Aids to Navigation line. When two or more NAVAIDS are listed and the NOTAM file identifiers is different from that shown on the Radio Aids to Navigation line, it will be shown with the NAVAID listing. NOTAM file identifiers for ILSs and its components (e.g., NDB (LOM) are the same as the associated airports and are not repeated. Automated Surface Observing System (ASOS), Automated Weather Observing System (ASOS), and Hazardous Inflight Weather Advisory Service (HIWAS) will be shown when this service is broadcast over selected NAVAIDS.

NAVAID information is tabulated as indicated in the following sample:



Restriction within the normal altitude/range of the navigational aid (See primary alphabetical listing for restrictions on VORTAC and VOR/DME).

Note: Those DME channel numbers with a (Y) suffix require TACAN to be placed in the "Y" mode to receive distance information

HIWAS—Hazardous Inflight Weather Advisory Service is a continuous broadcast of inflight weather advisories including summarized SIGMETs, convective SIGMETs, AIRMETs and urgent PIREPs. HIWAS is presently broadcast over selected VOR's and will be implemented throughout the conterminous U.S.

ASR/PAR—Indicates that Surveillance (ASR) or Precision (PAR) radar instrument approach minimums are published in the U.S. Terminal Procedures. Only part-time hours of operation will be shown.

#### RADIO CLASS DESIGNATIONS

VOR/DME/TACAN Standard Service Volume (SSV) Classifications

SSV Class	Altitudes	Distance
		(NM)
(T) Terminal	1000' to 12,000'	25
(L) Low Altitude	1000' to 18,000'	40
(H) High Altitude	1000' to 14,500'	40
	14,500' to 18,000'	100
	18,000' to 45,000'	130
	45.000' to 60.000'	100

NOTE: Additionally, (H) facilities provide (L) and (T) service volume and (L) facilities provide (T) service. Altitudes are with respect to the station's site elevation. Coverage is not available in a cone of airspace directly above the facility.

#### CONTINUED ON NEXT PAGE

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The term VOR is, operationally, a general term covering the VHF omnidirectional bearing type of facility without regard to the fact that the power, the frequency protected service volume, the equipment configuration, and operational requirements may vary between facilities at different locations.

=	
AB	Automatic Weather Broadcast.
DF	Direction Finding Service.
DME	UHF standard (TACAN compatible) distance measuring equipment.
DME(Y)	UHF standard (TACAN compatible) distance measuring equipment that require TACAN to be placed in the "Y" mode to receive DME.
GS	Glide slope.
Н	Non-directional radio beacon (homing), power 50 watts to less than 2,000 watts (50 NM at all altitudes).
HH	Non-directional radio beacon (homing), power 2,000 watts or more (75 NM at all altitudes).
H-SAB	Non-directional radio beacons providing automatic transcribed weather service.
ILS	Instrument Landing System (voice, where available, on localizer channel).
IM	Inner marker.
ISMLS	Interim Standard Microwave Landing System.
LDA	Localizer Directional Aid.
LMM	Compass locator station when installed at middle marker site (15 NM at all altitudes).
LOM	Compass locator station when installed at outer marker site (15 NM at all altitudes).
MH	Non-directional radio beacon (homing) power less than 50 watts (25 NM at all altitudes).
MLS	Microwave Landing System.
MM	Middle marker.
OM	Outer marker.
S	Simultaneous range homing signal and/or voice.
SABH	Non-directional radio beacon not authorized for IFR or ATC. Provides automatic weather broadcasts.
SDF	Simplified Direction Facility.
TACAN	UHF navigational facility-omnidirectional course and distance information.
VOR	VHF navigational facility-omnidirectional course only.
VOR/DME	Collocated VOR navigational facility and UHF standard distance measuring equipment.
VORTAC	Collocated VOR and TACAN navigational facilities.
W	Without voice on radio facility frequency.
Z	VHF station location marker at a LF radio facility.

#### ILS FACILITY PEFORMANCE CLASSIFICATION CODES

Codes define the ability of an ILS to support autoland operations. The two portions of the code represent Official Category and farthest point along a Category I, II, or III approach that the Localizer meets Category III structure tolerances.

Official Category: I, II, or III; the lowest minima on published or unpublished procedures supported by the ILS.

Farthest point of satisfactory Category III Localizer performance for Category I, II, or III approaches: A-4 NM prior to runway threshold, B-3500 ft prior to runway threshold, C-glide angle dependent but generally 750–1000 ft prior to threshold, T-runway threshold, D-3000 ft after runway threshold, and E-2000 ft prior to stop end of runway.

ILS information is tabulated as indicated in the following sample:



#### FREQUENCY PAIRING PLAN AND MLS CHANNELING

	TREGOLIOT FARRING FEAR AND MES SHARRELING								
MLS	VHF	TACAN	MLS	VHF	TACAN	MLS	VHF	TACAN	
CHANNEL	FREQUENCY	CHANNEL	CHANNEL	FREQUENCY	CHANNEL	CHANNEL	FREQUENCY	CHANNEL	
500	108.10	18X	568	109.45	31Y	636	114.15	88Y	
502	108.30	20X	570	109.55	32Y	638	114.25	89Y	
504	108.50	22X	572	109.65	33Y	640	114.35	90Y	
506	108.70	24X	574	109.75	34Y	642	114.45	91Y	
508	108.90	26X	576	109.85	35Y	644	114.55	92Y	
510	109.10	28X	578	109.95	36Y	646	114.65	93Y	
512	109.30	30X	580	110.05	37Y	648	114.75	94Y	
514	109.50	32X	582	110.15	38Y	650	114.85	95Y	
516	109.70	34X	584	110.25	39Y	652	114.95	96Y	
518	109.90	36X	586	110.35	40Y	654	115.05	97Y	
520	110.10	38X	588	110.45	41Y	656	115.15	98Y	
522	110.30	40X	590	110.55	42Y	658	115.25	99Y	
524	110.50	42X	592	110.65	43Y	660	115.35	100Y	
526	110.70	44X	594	110.75	44Y	662	115.45	101Y	
528	110.90	46X	596	110.85	45Y	664	115.55	102Y	
530	111.10	48X	598	110.95	46Y	666	115.65	103Y	
532	111.30	50X	600	111.05	47Y	668	115.75	104Y	
534	111.50	52X	602	111.15	48Y	670	115.85	105Y	
536	111.70	54X	604	111.25	49Y	672	115.95	106Y	
538	111.90	56X	606	111.35	50Y	674	116.05	107Y	
540	108.05	17Y	608	111.45	51Y	676	116.15	108Y	
542	108.15	18Y	610	111.55	52Y	678	116.25	109Y	
544	108.25	19Y	612	111.65	53Y	680	116.35	110Y	
546	108.35	20Y	614	111.75	54Y	682	116.45	111Y	
548	108.45	21Y	616	111.85	55Y	684	116.55	112Y	
550	108.55	22Y	618	111.95	56Y	686	116.65	113Y	
552	108.65	23Y	620	113.35	80Y	688	116.75	114Y	
554	108.75	24Y	622	113.45	81Y	690	116.85	115Y	
556	108.85	25Y	624	113.55	82Y	692	116.95	116Y	
558	108.95	26Y	626	113.65	83Y	694	117.05	117Y	
560	109.05	27Y	628	113.75	84Y	696	117.15	118Y	
562	109.15	28Y	630	113.85	85Y	698	117.25	119Y	
564	109.25	29Y	632	113.95	86Y				
566	109.35	30Y	634	114.05	87Y				

#### FREQUENCY PAIRING PLAN AND MLS CHANNELING

The following is a list of paired VOR/ILS VHF frequencies with TACAN channels and MLS channels.

TACAN	VHF	MLS	TACAN	VHF	MLS	TACAN	VHF	MLS
CHANNEL	FREQUENCY	CHANNEL	CHANNEL	FREQUENCY	CHANNEL	CHANNEL	FREQUENCY	CHANNEL
2X	134.5	-	19Y	108.25	544	25X	108.80	-
2Y	134.55	-	20X	108.30	502	25Y	108.85	556
11X	135.4	-	20Y	108.35	546	26X	108.90	508
11Y	135.45	-	21X	108.40	-	26Y	108.95	558
12X	135.5	-	21Y	108.45	548	27X	109.00	-
12Y	135.55	-	22X	108.50	504	27Y	109.05	560
17X	108.00	-	22Y	108.55	550	28X	109.10	510
17Y	108.05	540	23X	108.60	-	28Y	109.15	562
18X	108.10	500	23Y	108.65	552	29X	109.20	-
18Y	108.15	542	24X	108.70	506	29Y	109.25	564
19X	108.20	-	24Y	108.75	554	30X	109.30	512

30Y	TACAN Channel	VHF Frequency	MLS Channel	TACAN Channel	VHF Frequency	MLS Channel	TACAN Channel	VHF Frequency	MLS Channel
31X						-			
32X 109.50 514 64Y 133.75 - 97X 115.00 - 654 33X 109.60 - 66Y 133.80 - 98X 115.10 - 654 33X 109.60 - 66Y 133.95 - 98X 115.10 - 656 33X 109.60 - 66Y 133.95 - 98X 115.10 - 656 34X 109.70 516 66Y 133.95 - 99X 115.20 - 658 34X 109.75 574 67X 134.00 - 99Y 115.25 658 35X 109.80 - 67Y 134.05 - 100X 115.30 - 658 35X 109.80 - 67Y 134.05 - 100X 115.30 - 660 36X 109.90 518 68Y 134.10 - 100Y 115.26 660 36X 109.90 518 68Y 134.10 - 100Y 115.30 - 662 37X 110.00 - 69Y 134.25 - 100X 115.50 - 662 37X 110.00 - 69Y 134.25 - 100X 115.50 - 663 38X 109.80 - 70Y 112.35 - 100X 115.50 - 664 38X 110.10 520 70Y 112.35 - 100X 115.50 - 664 38X 110.10 520 70Y 112.35 - 100X 115.50 - 664 38X 110.10 520 70Y 112.35 - 100X 115.50 - 664 39X 110.25 584 72X 112.50 - 100X 115.70 668 40X 110.30 522 72Y 112.55 - 100X 115.70 668 40X 110.30 522 72Y 112.55 - 100X 115.80 666 40X 110.30 522 72Y 112.55 - 100X 115.80 666 40X 110.30 522 72Y 112.55 - 100X 115.80 670 41X 110.45 588 74X 112.60 - 109X 115.85 670 41X 110.65 590 75X 112.80 - 109X 115.85 670 41X 110.65 590 75X 112.80 - 109X 115.80 670 41X 110.50 524 74Y 112.75 - 100X 115.95 672 42Y 110.55 590 75X 112.80 - 100X 115.95 672 42Y 110.55 590 75X 112.80 - 100X 115.95 672 44Y 110.50 524 77X 112.95 - 100X 115.95 672 44Y 110.50 524 76X 112.80 - 100Y 116.05 674 44X 110.70 526 76X 112.80 - 100Y 116.55 684 46X 110.90 528 78X 113.90 - 110Y 116.05 674 44X 110.70 526 76Y 112.95 - 100X 116.05 674 44X 110.70 536 80Y 113.35 620 113X 116.00 - 100Y 116.55 684 46X 110.90 528 78X 113.10 - 110Y 116.55 684 46X 110.90 528 78X 113.10 - 110Y 116.55 684 47X 111.00 - 586 76Y 112.95 - 100Y 116.55 684 48X 111.00 - 588 78X 113.10 - 110Y 116.55 684 48X 111.00 - 588 78X 113.10 - 110Y 116.55 684 48X 111.00 - 588 78X 113.30 - 110Y 116.55 684 48X 111.00 - 588 78X 113.50 - 110X 116.50 - 58X 116.10 - 58X 117.7						-			-
32Y	31Y	109.45	568	64X	133.70	-	96Y	114.95	652
33X 109.60 - 66Y 133.85 - 98X 115.10 - 33Y 109.65 572 66X 133.90 - 98Y 115.15 656  34X 109.70 516 66Y 133.95 - 99X 115.20 - 34Y 109.75 574 67X 134.00 - 99Y 115.25 658  35X 109.80 - 67Y 134.05 - 100X 115.30 - 35Y 109.85 576 68X 134.10 - 100Y 115.35 660  36X 109.90 518 68Y 134.15 - 101X 115.40 - 36Y 109.95 578 68X 134.20 - 101Y 115.45 662  37X 110.00 - 69Y 134.25 - 102X 115.50 - 37Y 110.05 580 70X 112.30 - 102X 115.50 - 37Y 110.05 580 70X 112.30 - 102X 115.50 - 37Y 110.05 580 70X 112.30 - 102X 115.50 - 38Y 10.15 582 71X 112.40 - 103X 115.60 - 38Y 10.15 582 71X 112.40 - 103X 115.60 - 38Y 110.15 582 71X 112.40 - 103X 115.60 - 39Y 110.25 584 72X 112.50 - 104X 115.70 668  40X 110.30 522 72Y 112.55 - 104X 115.70 668  40X 110.30 522 72Y 112.55 - 104X 115.80 670 110.35 588 73X 112.60 - 105X 115.80 670 110.41 110.45 588 74X 112.75 - 106X 115.80 670 110.41 110.45 588 74X 112.75 - 106X 115.80 670 110.41 110.55 590 75Y 112.85 - 106X 115.80 670 110.41 110.55 590 75Y 112.85 - 106X 115.80 670 110.41 110.55 590 75Y 112.85 - 106X 115.80 670 110.41 110.55 590 75Y 112.85 - 106X 115.80 670 110.41 110.55 590 75Y 112.85 - 106X 115.80 670 110.41 110.55 590 75Y 112.85 - 106X 115.80 674 110.55 590 75Y 112.85 - 106X 115.55 678 110.65 592 76X 112.80 - 106Y 116.55 678 110.65 598 78Y 113.15 - 110Y 116.65 68 110Y 116.55 684 110.75 688 110.75 688 110.75 688 110.75 688 110.75 688 110.75 688 110.75 688 110.75 688 110.75 688 110.75 688 110.75 688 110.75 688 110.75 688 110.75 688 110.75 688 110.75 688 110.75 688 110.75 689 110.75 689 11	32X	109.50	514	64Y	133.75	-	97X	115.00	-
38X 109.65 572 66K 133.90 - 98Y 115.5 656 34X 109.70 516 66Y 133.95 - 99X 115.20 - 34Y 109.75 574 67X 134.00 - 99Y 115.25 658 35X 109.80 - 67Y 134.05 - 100X 115.30 - 35Y 109.85 576 68K 134.10 - 100Y 115.35 660 36X 109.90 518 68X 134.10 - 100Y 115.35 660 36X 109.90 518 68X 134.20 - 101Y 115.45 662 37X 110.00 - 69Y 134.25 - 102X 115.50 - 37Y 110.05 580 70X 112.30 - 102Y 115.55 664 38K 110.10 520 70Y 112.35 - 103X 115.60 - 38K 110.10 520 70Y 112.35 - 103X 115.65 664 38K 110.10 520 70Y 112.35 - 103X 115.65 664 39X 110.20 71Y 112.45 - 104X 115.70 668 40X 110.30 522 72Y 112.55 - 106X 115.80 - 40X 110.30 522 72Y 112.55 - 106X 115.80 - 41X 110.40 - 73Y 112.60 - 106Y 115.75 668 41X 110.40 - 73Y 112.65 - 106X 115.90 - 41X 110.45 588 74X 112.70 - 106Y 115.75 672 42X 110.50 524 74Y 112.75 - 107X 116.00 - 42X 110.50 592 76X 112.80 - 107Y 116.05 674 43X 110.60 - 75Y 112.85 - 106X 115.90 - 44X 110.70 526 76Y 112.95 - 106X 116.30 - 674 44X 110.70 526 76Y 112.95 - 106X 116.30 - 674 44X 110.70 526 76Y 112.95 - 106X 116.30 - 674 44X 110.70 526 76Y 112.95 - 106X 116.30 - 674 44X 110.70 526 76Y 112.95 - 106X 116.00 - 674 44X 110.70 526 76Y 112.95 - 106X 116.30 - 674 44X 110.70 526 76Y 112.95 - 106X 116.50 - 674 44X 110.70 526 76Y 112.95 - 106X 116.50 - 674 44X 110.70 526 76Y 112.95 - 106X 116.50 - 674 44X 110.70 526 76Y 112.95 - 106X 116.50 - 674 44X 110.70 526 76Y 112.95 - 106X 116.50 - 678 44X 110.80 - 77Y 113.05 - 110X 116.00 - 674 44X 110.70 526 76Y 112.95 - 106X 116.50 - 678 45Y 110.85 596 78X 113.10 - 110Y 116.55 680 46X 110.90 528 78Y 113.15 - 111X 116.40 - 682 47Y 111.05 500 80Y 113.95 622 114X 116.70 - 688 50X 111.30 532 88Y 113.50 - 114Y 116.75 688 50X 111.30 532 88Y 113.50 - 114Y 116.75 688 50X 111.30 532 88Y 113.55 622 114X 116.70 - 694 53X 111.60 - 88Y 113.85 632 119X 117.10 - 565 50Y 111.55 618 88X 113.80 - 117Y 117.05 698 50X 111.30 532 88Y 114.55 642 119X 117.75 698 50X 111.50 534 84Y 113.75 622 114X 117.70 - 1695 50X 111.95 618 88X 113.80 - 117Y 117.05 698 50X 111.85 616 88X 113.80 - 117Y 117.05 698 50X 111.95 618	32Y	109.55	570	65X	133.80	-	97Y	115.05	654
34X         109.70         516         66Y         133.95         -         99X         115.20         -           38X         109.80         -         67Y         134.00         -         99Y         115.25         658           38X         109.85         576         68X         134.10         -         100X         115.30         -           36X         109.95         578         68X         134.15         -         101X         115.40         -           37Y         110.00         -         69Y         134.25         -         102Y         115.55         664           38X         110.10         520         70Y         112.35         -         102Y         115.55         664           38Y         110.15         582         71X         112.40         -         103Y         115.65         666           39X         110.20         -         71Y         112.45         -         104Y         115.75         688           40X         110.30         522         72Y         112.55         -         104Y         115.75         688           40X         110.35         586         73X         112.65	33X	109.60	-	65Y	133.85	-	98X	115.10	-
38X 109.80 - 67Y 134.05 - 100X 115.25 658 38X 109.85 - 66Y 134.05 - 100X 115.35 668 38X 109.85 576 68X 134.10 - 100Y 115.35 668 38X 109.95 578 69X 134.20 - 101Y 115.45 662 37X 110.00 - 69Y 134.25 - 102X 115.55 664 38X 110.00 - 590 70X 112.30 - 102Y 115.55 664 38X 110.10 520 70Y 112.35 - 103X 115.65 664 38X 110.10 520 70Y 112.35 - 103X 115.65 664 38X 110.10 520 70Y 112.35 - 103X 115.65 664 38X 110.10 580 70X 112.40 - 103Y 115.65 666 39X 110.25 584 71X 112.45 - 104X 115.75 668 40X 110.35 586 73X 112.60 - 104Y 115.75 668 40X 110.35 586 73X 112.60 - 105Y 115.85 670 41X 110.40 - 73Y 112.55 - 105X 115.80 - 104X 115.70 688 41Y 110.45 588 74X 112.70 - 106Y 115.95 672 42X 110.55 590 75X 112.80 - 107Y 116.00 - 42Y 110.55 590 75X 112.80 - 107Y 116.00 674 43X 110.60 - 75Y 112.85 - 106X 115.90 - 104X 115.76 676 44X 110.70 526 76Y 112.95 - 106X 115.90 - 104X 110.55 676 44X 110.70 526 76Y 112.95 - 106X 115.90 - 104X 115.70 674 44X 110.75 594 77X 113.00 - 106Y 115.95 672 44X 110.55 590 75X 112.80 - 107Y 116.00 - 43Y 110.65 592 76X 112.90 - 108Y 116.15 676 44X 110.75 594 77X 113.00 - 109Y 116.20 - 44X 110.75 594 77X 113.00 - 109Y 116.20 - 44X 110.75 594 77X 113.00 - 109Y 116.25 678 48X 110.80 - 77Y 113.25 - 110X 116.30 - 45Y 110.85 596 78X 113.10 - 110Y 116.55 680 46X 110.90 528 78Y 113.15 - 111X 116.40 - 47Y 110.05 598 79X 113.20 - 111Y 116.45 682 47X 111.00 - 79Y 113.25 - 112X 116.50 - 44X 110.70 526 600 80X 113.30 - 112Y 116.55 684 48X 111.10 530 80Y 113.35 620 113X 116.60 - 15Y 115 116.50 -	33Y	109.65	572	66X	133.90	-	98Y	115.15	656
SSK	34X	109.70	516	66Y	133.95	-	99X	115.20	-
38Y         109.85         576         68X         134.10         -         100Y         115.35         660           36Y         109.95         578         69X         134.20         -         101Y         115.45         662           37X         110.00         69Y         134.25         -         101Y         115.55         664           38X         110.10         520         70Y         112.35         -         102Y         115.55         664           38X         110.15         582         71X         112.40         -         103Y         115.60         -           39X         110.25         584         72X         112.50         -         104X         115.70         -           40X         110.35         586         73X         112.60         -         105Y         115.80         -           40X         110.35         586         73X         112.60         -         105Y         115.80         -           41X         110.40         -         73Y         112.65         -         106X         115.90         -           41X         110.45         588         74X         112.70         -	34Y	109.75	574	67X	134.00	-	99Y	115.25	658
36X         109.90         518         68Y         134.20         -         101X         115.40         -           36Y         109.95         578         69X         134.20         -         101Y         115.50         -           37Y         110.05         580         70X         112.30         -         102X         115.55         664           38X         110.15         582         71X         112.40         -         103X         115.65         666           39X         110.20         -         71Y         112.45         -         104Y         115.75         668           39X         110.25         584         72X         112.50         -         104Y         115.75         668           40X         110.30         522         72Y         112.55         -         105X         115.80         -           40Y         110.35         586         73X         112.65         -         106X         115.85         67           41X         110.40         -         73Y         112.65         -         106X         115.85         67           42X         110.50         524         74Y         112.	35X	109.80	-	67Y	134.05	-	100X	115.30	-
38Y         109.95         578         69X         134.25         -         102X         115.50         -           37Y         110.05         580         70X         112.30         -         102X         115.55         664           38X         110.10         520         70Y         112.35         -         103X         115.60         -           38Y         110.15         582         71X         112.40         -         103Y         115.65         666           39X         110.25         584         72X         112.50         -         104X         115.76         -           40X         110.30         522         72Y         112.55         -         106X         115.80         -           40Y         110.35         586         73X         112.60         -         105Y         115.85         670           41X         110.40         -         73Y         112.65         -         106X         115.95         672           42Y         110.55         588         74X         112.70         -         106Y         115.95         672           42Y         110.55         590         75X         11	35Y	109.85	576	68X	134.10	-	100Y	115.35	660
37X         110.00         -         69Y         134.25         -         102Y         115.55         664           38X         110.10         520         70Y         112.35         -         103X         115.60         -           38Y         110.15         582         71X         112.40         -         103Y         115.60         -           39X         110.25         584         72X         112.50         -         104X         115.70         -           39Y         110.25         584         72X         112.50         -         104Y         115.75         668           40X         110.30         522         72Y         112.55         -         105X         115.80         -           40Y         110.35         586         73X         112.60         -         105Y         115.85         670           41X         110.40         -         73Y         112.65         -         106X         115.90         -           42X         110.50         524         74X         112.75         -         107X         116.00         -           43X         110.60         -         75Y         112.85 <td>36X</td> <td>109.90</td> <td>518</td> <td>68Y</td> <td>134.15</td> <td>-</td> <td>101X</td> <td>115.40</td> <td>-</td>	36X	109.90	518	68Y	134.15	-	101X	115.40	-
37Y         110.05         580         70X         112.35         -         103X         115.60         -           38Y         110.15         582         71X         112.40         -         103X         115.65         666           39X         110.20         -         71Y         112.45         -         104X         115.75         668           39X         110.25         584         72X         112.50         -         104X         115.75         668           40X         110.35         586         73X         112.60         -         105Y         115.86         -           40Y         110.35         586         73X         112.60         -         105Y         115.86         -           41Y         110.40         -         73Y         112.65         -         106Y         115.95         672           42X         110.55         580         75X         112.75         -         107X         116.00         -           42Y         110.55         590         75X         112.80         -         107Y         116.05         674           43X         110.65         592         76X         112.		109.95	578		134.20	-		115.45	662
38X         110.10         520         70Y         112.35         -         103X         115.65         666           39X         110.25         582         71X         112.40         -         103Y         115.65         666           39X         110.25         584         72X         112.50         -         104X         115.70         -           39Y         110.35         586         73X         112.60         -         105X         115.80         -           40Y         110.35         586         73X         112.60         -         105Y         115.86         670           41X         110.40         -         73Y         112.65         -         106X         115.90         -           42X         110.50         524         74X         112.75         -         107X         116.00         -           42X         110.55         590         75X         112.80         -         107Y         116.00         -           43X         110.65         592         76X         112.95         -         108X         116.10         -           43X         110.65         592         76X         112.95						-			
38Y         110.15         582         71X         112.40         .         103Y         115.65         666           39Y         110.20         -         71Y         112.45         -         104X         115.75         668           40X         110.30         522         72Y         112.55         -         105X         115.80         -           41X         110.40         -         73Y         112.65         -         106X         115.80         -           41X         110.40         -         73Y         112.65         -         106X         115.90         -           41X         110.40         -         73Y         112.65         -         106X         115.90         -           41X         110.60         -         75X         112.80         -         107X         116.00         -           42X         110.55         590         75X         112.85         -         108X         116.10         -           43X         110.60         -         75Y         112.85         -         108X         116.10         -           44X         110.75         594         77X         113.00						-			664
39X         110.20         .         71Y         112.45         .         104X         115.75         668           40X         110.30         522         72Y         112.55         .         105X         115.80         .           40Y         110.35         586         73X         112.60         .         105Y         115.85         .           41X         110.40         .         73Y         112.65         .         106Y         115.90         .           41Y         110.45         588         74X         112.75         .         107X         116.00         .           42X         110.55         590         75X         112.80         .         107Y         116.00         .           43X         110.60         .         75Y         112.85         .         108X         116.10         .           43X         110.60         .         75Y         112.85         .         108X         116.10         .           43X         110.60         .         77Y         113.00         .         109Y         116.25         678           44X         110.70         528         78Y         113.00						-			
39Y			582			-			666
40X         110.30         522         72Y         112.55         .         105X         115.80         .           40Y         110.35         586         73X         112.60         .         105Y         115.85         670           41X         110.40         .         73Y         112.65         .         106Y         115.90         .           41Y         110.50         588         74X         112.75         .         106Y         116.90         .           42Y         110.55         590         75X         112.85         .         107Y         116.00         .           43X         110.60         .         75Y         112.85         .         108X         116.10         .           43X         110.65         592         76X         112.90         .         108Y         116.20         .           44X         110.70         526         76Y         112.95         .         109X         116.25         676           44X         110.75         594         77X         113.00         .         1109X         116.20         .           45Y         110.85         596         78X         113.10 <td></td> <td></td> <td>-</td> <td></td> <td></td> <td>-</td> <td></td> <td></td> <td>-</td>			-			-			-
40V         110.35         586         73X         112.65         -         106X         115.90         -           41X         110.40         -         73Y         112.65         -         106X         115.90         -           41Y         110.45         588         74X         112.70         -         106Y         115.95         672           42X         110.50         524         74Y         112.75         -         107X         116.00         -           43X         110.60         -         75Y         112.85         -         108X         116.10         -           43Y         110.65         592         76X         112.95         -         109X         116.15         676           44X         110.70         526         76Y         112.95         -         109X         116.15         676           44X         110.75         594         77X         113.00         -         109Y         116.25         678           45Y         110.85         596         78X         113.10         -         110Y         116.35         680           47X         110.95         598         79X         113.						-			
41X         110.40         -         73Y         112.65         -         106X         115.90         -           41Y         110.45         588         74X         112.70         -         106Y         115.95         672           42X         110.55         590         75X         112.80         -         107Y         116.05         -           43X         110.65         592         76X         112.90         -         108Y         116.15         676           44X         110.70         526         76Y         112.95         -         109X         116.15         676           44X         110.70         526         76Y         112.95         -         109X         116.25         678           44X         110.75         594         77X         113.00         -         100X         116.30         -           45Y         110.80         -         77Y         113.05         -         110X         116.30         -           45Y         110.85         596         78X         113.10         -         111X         116.40         -           47Y         111.05         60         80X         113.20<						-			
41Y         110.45         588         74X         112.70         -         106Y         115.95         672           42X         110.50         524         74Y         112.75         -         107X         116.00         -           43X         110.60         -         75Y         112.80         -         107Y         116.05         674           43X         110.60         -         75Y         112.85         -         108X         116.10         -           43Y         110.65         592         76X         112.90         -         108X         116.15         676           44X         110.70         526         76Y         112.95         -         109X         116.20         -           45X         110.80         -         77Y         113.05         -         110X         116.25         678           45X         110.85         596         78X         113.10         -         110Y         116.35         680           46X         110.95         598         79X         113.20         -         111Y         116.45         682           47X         111.05         600         80X         113.			586			-			670
42X         110.50         524         74Y         112.75         -         107X         116.00         -           42Y         110.55         590         75X         112.80         -         107Y         116.05         674           43X         110.65         592         76X         112.90         -         108Y         116.15         676           44X         110.75         594         77X         113.00         -         109Y         116.25         678           45X         110.80         -         77Y         113.05         -         110X         116.30         -           45Y         110.85         596         78X         113.10         -         110Y         116.35         680           46X         110.90         528         78Y         113.20         -         111X         116.40         -           47X         111.05         600         80X         113.20         -         1112Y         116.50         -           47X         111.05         600         80X         113.30         -         112Y         116.55         684           48X         111.15         602         81X         1			_			-			
42Y         110.55         590         75X         112.80         -         107Y         116.05         674           43X         110.60         -         75Y         112.85         -         108X         116.10         -           43Y         110.65         592         76X         112.95         -         109X         116.15         676           44X         110.70         526         76Y         112.95         -         109X         116.20         -           44Y         110.75         594         77X         113.00         -         109Y         116.20         -           45X         110.80         -         77Y         113.05         -         110X         116.30         -           46X         110.95         598         79X         113.10         -         110Y         116.35         680           46X         110.95         598         79X         113.20         -         111Y         116.45         682           47X         111.00         -         79Y         113.25         -         112X         116.50         -           48X         111.10         530         80Y         113.35 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td>-</td> <td></td> <td></td> <td>672</td>						-			672
43X         110.60         -         75Y         112.85         -         108X         116.10         -           43Y         110.65         592         76X         112.90         -         108Y         116.15         676           44X         110.75         594         77X         113.00         -         109Y         116.20         -           45X         110.80         -         77Y         113.05         -         110X         116.30         -           45Y         110.85         596         78X         113.10         -         110Y         116.35         680           46X         110.90         528         78Y         113.15         -         111X         116.40         -           46Y         110.95         598         79X         113.20         -         111Y         116.45         682           47X         111.00         -         79Y         113.25         -         112X         116.50         -           48X         111.15         600         80X         113.30         -         112Y         116.55         684           48Y         111.25         602         81X         113.40 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td>-</td> <td></td> <td></td> <td></td>						-			
43Y         110.65         592         76X         112.90         -         108Y         116.20         -           44X         110.70         526         76Y         112.95         -         109Y         116.20         -           45X         110.80         -         77Y         113.00         -         110X         116.30         -           45Y         110.85         596         78X         113.10         -         110Y         116.35         680           46X         110.90         528         78Y         113.15         -         111X         116.40         -           46Y         110.95         598         79X         113.25         -         111Y         116.45         682           47X         111.05         600         80X         113.30         -         112Y         116.55         684           48X         111.10         530         80Y         113.30         -         112Y         116.65         686           49X         111.20         -         81Y         113.40         -         113Y         116.65         686           50X         111.35         606         83X         113.			590			-			674
44X         110.70         526         76Y         112.95         -         109X         116.25         678           44Y         110.75         594         77X         113.05         -         110X         116.30         -           45Y         110.85         596         78X         113.10         -         110Y         116.35         680           46X         110.90         528         78Y         113.15         -         111X         116.40         -           46Y         110.95         598         79X         113.20         -         111Y         116.45         682           47X         111.00         -         79Y         113.25         -         112X         116.50         -           47Y         111.05         600         80X         113.35         620         113X         116.60         -           48X         111.15         602         81X         113.40         -         113Y         116.65         684           49X         111.25         604         82X         113.50         -         114Y         116.70         -           49Y         111.25         604         82X         11						-			
44Y         110.75         594         77X         113.00         -         109Y         116.25         678           45X         110.80         -         77Y         113.05         -         110X         116.30         -           45Y         110.85         596         78X         113.10         -         110Y         116.35         680           46X         110.90         528         78Y         113.15         -         111X         116.40         -           46Y         110.95         598         79X         113.25         -         111Y         116.50         -           47Y         111.05         600         80X         113.30         -         112Y         116.55         684           48X         111.10         530         80Y         113.35         620         113X         116.65         686           49X         111.20         -         81Y         113.45         622         114X         116.70         -           49Y         111.25         604         82X         113.55         624         115X         116.80         -           50Y         111.35         606         83X						-			
45X         110.80         -         77Y         113.05         -         110X         116.30         -           45Y         110.85         596         78X         113.10         -         110Y         116.35         680           46Y         110.95         598         79X         113.20         -         111Y         116.40         -           47Y         111.00         -         79Y         113.25         -         111Y         116.50         -           47Y         111.00         600         80X         113.30         -         112Y         116.50         -           47Y         111.10         530         80Y         113.35         620         113X         116.60         -           48Y         111.15         602         81X         113.40         -         113Y         116.65         686           49X         111.25         604         82X         113.50         -         114Y         116.70         -           49Y         111.25         604         82X         113.50         -         114Y         116.70         -           50X         111.30         532         82Y         113.55 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td>-</td> <td></td> <td></td> <td>_</td>						-			_
45Y         110.85         596         78X         113.10         -         110Y         116.35         680           46X         110.90         528         78Y         113.15         -         111X         116.40         -           46Y         110.95         598         79X         113.20         -         111Y         116.45         682           47X         111.00         -         79Y         113.25         -         112X         116.50         -           47Y         111.05         600         80X         113.30         -         112Y         116.55         684           48X         111.15         602         81X         113.40         -         113Y         116.65         686           49X         111.20         -         81Y         113.50         -         114Y         116.75         688           50X         111.30         532         82Y         113.55         624         115X         116.75         688           50X         111.35         606         83X         113.50         -         115Y         116.85         690           51X         111.40         -         83X						-			678
46X         110.90         528         78Y         113.15         -         111X         116.40         -           46Y         110.95         598         79X         113.20         -         111Y         116.50         -           47X         111.05         600         80X         113.30         -         112Y         116.55         684           48X         111.10         530         80Y         113.35         620         113X         116.60         -           48Y         111.15         602         81X         113.40         -         113Y         116.65         686           49X         111.20         -         81Y         113.45         622         114X         116.70         -           49Y         111.25         604         82X         113.50         -         114Y         116.75         688           50X         111.30         532         82Y         113.55         624         115X         116.80         -           50Y         111.35         606         83X         113.60         -         115Y         116.85         690           51X         111.40         -         83Y						-			-
46Y         110.95         598         79X         113.20         -         111Y         116.45         682           47X         111.00         -         79Y         113.25         -         112X         116.50         -           47Y         111.05         600         80X         113.30         -         112Y         116.50         -           48X         111.10         530         80Y         113.35         620         113X         116.60         -           48Y         111.15         602         81X         113.40         -         113Y         116.65         686           49X         111.25         604         82X         113.50         -         114Y         116.75         688           50X         111.30         532         82Y         113.50         -         114Y         116.75         688           50X         111.35         606         83X         113.60         -         115Y         116.85         690           51X         111.40         -         83Y         113.65         626         116X         116.90         -           51Y         11.45         608         84X         1						-			680
47X         111.00         -         79Y         113.25         -         112X         116.50         -           47Y         111.05         600         80X         113.30         -         112Y         116.55         684           48X         111.10         530         80Y         113.35         620         113X         116.60         -           48Y         111.15         602         81X         113.40         -         113Y         116.65         686           49X         111.20         -         81Y         113.50         -         114Y         116.75         688           50X         111.30         532         82Y         113.50         -         114Y         116.75         688           50Y         111.35         606         83X         113.60         -         115Y         116.85         690           51X         111.45         608         84X         113.70         -         116Y         116.85         690           51X         111.45         608         84X         113.70         -         116Y         116.85         690           52X         111.50         534         84Y <t< td=""><td></td><td></td><td></td><td></td><td></td><td>-</td><td></td><td></td><td>- 692</td></t<>						-			- 692
47Y         111.05         600         80X         113.30         -         112Y         116.55         684           48X         111.10         530         80Y         113.35         620         113X         116.60         -           48Y         111.15         602         81X         113.40         -         113Y         116.65         686           49X         111.20         -         81Y         113.45         622         114X         116.70         -           49Y         111.25         604         82X         113.50         -         114Y         116.75         688           50X         111.35         606         83X         113.50         -         114Y         116.75         688           50X         111.35         606         83X         113.65         624         115X         116.80         -90           51X         111.40         -         83Y         113.65         626         116X         116.90         -           51Y         111.45         608         84X         113.70         -         116Y         116.95         692           52X         111.50         534         84Y			598			-			082
48X         111.10         530         80Y         113.35         620         113X         116.60         -           48Y         111.15         602         81X         113.40         -         113Y         116.65         686           49X         111.20         -         81Y         113.45         622         114X         116.70         -           49Y         111.25         604         82X         113.50         -         114Y         116.75         688           50X         111.30         532         82Y         113.55         624         115X         116.80         -           50Y         111.35         606         83X         113.60         -         115Y         116.85         690           51X         111.40         -         83Y         113.60         -         115Y         116.85         690           51Y         111.45         608         84X         113.70         -         116Y         116.95         692           52X         111.50         534         84Y         113.75         628         117X         117.00         -           52Y         111.55         610         85X			600			-			691
48Y         111.15         602         81X         113.40         -         113Y         116.65         686           49X         111.20         -         81Y         113.45         622         114X         116.70         -           49Y         111.25         604         82X         113.50         -         114Y         116.75         688           50X         111.30         532         82Y         113.55         624         115X         116.80         -           50Y         111.35         606         83X         113.60         -         115Y         116.85         690           51X         111.40         -         83Y         113.65         626         116X         116.90         -           51Y         111.45         608         84X         113.70         -         116Y         116.95         692           52X         111.50         534         84Y         113.70         -         116Y         116.95         692           52X         111.55         610         85X         113.80         -         117Y         117.00         -           53X         111.60         -         85Y						620			
49X         111.20         -         81Y         113.45         622         114X         116.70         -           49Y         111.25         604         82X         113.50         -         114Y         116.75         688           50X         111.30         532         82Y         113.55         624         115X         116.80         -           50Y         111.35         606         83X         113.60         -         115Y         116.85         690           51X         111.40         -         83Y         113.65         626         116X         116.90         -           51Y         111.45         608         84X         113.70         -         116Y         116.95         692           52X         111.50         534         84Y         113.75         628         117X         117.00         -           52Y         111.55         610         85X         113.85         630         118X         117.10         -           53X         111.60         -         85Y         113.85         630         118X         117.10         -           53Y         111.65         612         86X <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>_</td></t<>									_
49Y         111.25         604         82X         113.50         -         114Y         116.75         688           50X         111.30         532         82Y         113.55         624         115X         116.80         -           50Y         111.35         606         83X         113.65         626         115Y         116.85         690           51X         111.40         -         83Y         113.65         626         116X         116.90         -           51Y         111.45         608         84X         113.70         -         116Y         116.95         692           52X         111.50         534         84Y         113.75         628         117X         117.00         -           52Y         111.55         610         85X         113.85         630         118X         117.10         -           53X         111.60         -         85Y         113.85         630         118X         117.10         -           53Y         111.65         612         86X         113.95         632         118X         117.10         -           54Y         111.75         614         87X									
50X         111.30         532         82Y         113.55         624         115X         116.80         -           50Y         111.35         606         83X         113.60         -         115Y         116.85         690           51X         111.40         -         83Y         113.65         626         116X         116.90         -           51Y         111.45         608         84X         113.70         -         116Y         116.95         692           52X         111.50         534         84Y         113.75         628         117X         117.00         -           52Y         111.55         610         85X         113.80         -         117Y         117.05         694           53X         111.60         -         85Y         113.85         630         118X         117.10         -           53Y         111.65         612         86X         113.90         -         118Y         117.15         696           54X         111.70         536         86Y         113.95         632         119X         117.25         698           55X         111.80         -         87Y									
50Y         111.35         606         83X         113.60         -         115Y         116.85         690           51X         111.40         -         83Y         113.65         626         116X         116.90         -           51Y         111.45         608         84X         113.70         -         116Y         116.95         692           52X         111.50         534         84Y         113.75         628         117X         117.00         -           52Y         111.55         610         85X         113.80         -         117Y         117.05         694           53X         111.60         -         85Y         113.85         630         118X         117.10         -           53Y         111.65         612         86X         113.90         -         118Y         117.15         696           54X         111.70         536         86Y         113.95         632         119X         117.20         -           54Y         111.75         614         87X         114.00         -         119Y         117.25         698           55X         111.80         -         87Y <t< td=""><td></td><td></td><td></td><td></td><td></td><td>624</td><td></td><td></td><td>-</td></t<>						624			-
51X         111.40         -         83Y         113.65         626         116X         116.90         -           51Y         111.45         608         84X         113.70         -         116Y         116.95         692           52X         111.50         534         84Y         113.75         628         117X         117.00         -           52Y         111.55         610         85X         113.80         -         117Y         117.05         694           53X         111.60         -         85Y         113.85         630         118X         117.10         -           53Y         111.65         612         86X         113.95         632         119X         117.15         696           54X         111.70         536         86Y         113.95         632         119X         117.20         -           54Y         111.75         614         87X         114.00         -         119Y         117.25         698           55X         111.80         -         87Y         114.05         634         120X         117.30         -           55Y         111.85         616         88X									690
51Y         111.45         608         84X         113.70         -         116Y         116.95         692           52X         111.50         534         84Y         113.75         628         117X         117.00         -           52Y         111.55         610         85X         113.80         -         117Y         117.05         694           53X         111.60         -         85Y         113.85         630         118X         117.10         -           53Y         111.65         612         86X         113.90         -         118Y         117.15         696           54X         111.70         536         86Y         113.95         632         119X         117.20         -           54Y         111.75         614         87X         114.05         634         120X         117.30         -           55Y         111.80         -         87Y         114.05         634         120X         117.30         -           56X         111.90         538         88Y         114.15         636         121X         117.40         -           56Y         111.95         618         89X						626			
52X         111.50         534         84Y         113.75         628         117X         117.00         -           52Y         111.55         610         85X         113.80         -         117Y         117.05         694           53X         111.60         -         85Y         113.85         630         118X         117.10         -           53Y         111.65         612         86X         113.95         632         119X         117.20         -           54X         111.70         536         86Y         113.95         632         119X         117.20         -           54Y         111.75         614         87X         114.00         -         119Y         117.25         698           55X         111.80         -         87Y         114.05         634         120X         117.30         -           55Y         111.85         616         88X         114.10         -         120Y         117.35         -           56X         111.90         538         88Y         114.15         636         121X         117.40         -           56Y         111.95         618         89X <t< td=""><td></td><td></td><td>608</td><td></td><td></td><td>-</td><td></td><td></td><td>692</td></t<>			608			-			692
52Y         111.55         610         85X         113.80         -         117Y         117.05         694           53X         111.60         -         85Y         113.85         630         118X         117.10         -           53Y         111.65         612         86X         113.90         -         118Y         117.15         696           54X         111.70         536         86Y         113.95         632         119X         117.20         -           54Y         111.75         614         87X         114.00         -         119Y         117.25         698           55X         111.80         -         87Y         114.05         634         120X         117.30         -           55Y         111.85         616         88X         114.10         -         120Y         117.35         -           56X         111.90         538         88Y         114.10         -         120Y         117.35         -           56Y         111.95         618         89X         114.20         -         121Y         117.40         -           57Y         112.00         -         89Y         114.						628			-
53X         111.60         -         85Y         113.85         630         118X         117.10         -           53Y         111.65         612         86X         113.90         -         118Y         117.15         696           54X         111.70         536         86Y         113.95         632         119X         117.20         -           54Y         111.75         614         87X         114.00         -         119Y         117.25         698           55X         111.80         -         87Y         114.05         634         120X         117.30         -           55Y         111.85         616         88X         114.10         -         120Y         117.35         -           56X         111.90         538         88Y         114.15         636         121X         117.40         -           56Y         111.95         618         89X         114.25         638         122X         117.50         -           57X         112.00         -         89Y         114.25         638         122X         117.50         -           57Y         112.05         -         90X         11									694
53Y         111.65         612         86X         113.90         -         118Y         117.15         696           54X         111.70         536         86Y         113.95         632         119X         117.20         -           54Y         111.75         614         87X         114.00         -         119Y         117.25         698           55X         111.80         -         87Y         114.05         634         120X         117.30         -           55Y         111.85         616         88X         114.10         -         120Y         117.35         -           56X         111.90         538         88Y         114.15         636         121X         117.40         -           56Y         111.95         618         89X         114.20         -         121Y         117.45         -           57X         112.00         -         89Y         114.25         638         122X         117.50         -           57Y         112.05         -         90X         114.30         -         122Y         117.55         -           58X         112.10         -         90Y         114.35			-			630			-
54X         111.70         536         86Y         113.95         632         119X         117.20         -           54Y         111.75         614         87X         114.00         -         119Y         117.25         698           55X         111.80         -         87Y         114.05         634         120X         117.30         -           55Y         111.85         616         88X         114.10         -         120Y         117.35         -           56X         111.90         538         88Y         114.15         636         121X         117.40         -           56Y         111.95         618         89X         114.20         -         121Y         117.45         -           57X         112.00         -         89Y         114.25         638         122X         117.50         -           57Y         112.05         -         90X         114.35         640         123X         117.60         -           58X         112.10         -         90Y         114.35         640         123X         117.60         -           58Y         112.15         -         91X         114.40			612						696
54Y         111.75         614         87X         114.00         -         119Y         117.25         698           55X         111.80         -         87Y         114.05         634         120X         117.30         -           55Y         111.85         616         88X         114.10         -         120Y         117.35         -           56X         111.90         538         88Y         114.15         636         121X         117.40         -           56Y         111.95         618         89X         114.20         -         121Y         117.45         -           57X         112.00         -         89Y         114.25         638         122X         117.50         -           57Y         112.05         -         90X         114.30         -         122Y         117.55         -           58X         112.10         -         90Y         114.35         640         123X         117.60         -           58Y         112.15         -         91X         114.40         -         123Y         117.65         -           59X         112.20         -         91Y         114.45						632			-
55X         111.80         -         87Y         114.05         634         120X         117.30         -           55Y         111.85         616         88X         114.10         -         120Y         117.35         -           56X         111.90         538         88Y         114.15         636         121X         117.40         -           56Y         111.95         618         89X         114.20         -         121Y         117.45         -           57X         112.00         -         89Y         114.25         638         122X         117.50         -           57Y         112.05         -         90X         114.30         -         122Y         117.55         -           58X         112.10         -         90Y         114.35         640         123X         117.60         -           58Y         112.15         -         91X         114.40         -         123Y         117.65         -           59X         112.20         -         91Y         114.45         642         124X         117.70         -           59Y         112.25         -         92X         114.50									698
56X         111.90         538         88Y         114.15         636         121X         117.40         -           56Y         111.95         618         89X         114.20         -         121Y         117.45         -           57X         112.00         -         89Y         114.25         638         122X         117.50         -           57Y         112.05         -         90X         114.30         -         122Y         117.55         -           58X         112.10         -         90Y         114.35         640         123X         117.60         -           58Y         112.15         -         91X         114.40         -         123Y         117.65         -           59X         112.20         -         91Y         114.45         642         124X         117.70         -           59Y         112.25         -         92X         114.50         -         124Y         117.75         -           60X         133.30         -         92Y         114.55         644         125X         117.80         -           60Y         133.35         -         93X         114.60						634			-
56Y         111.95         618         89X         114.20         -         121Y         117.45         -           57X         112.00         -         89Y         114.25         638         122X         117.50         -           57Y         112.05         -         90X         114.30         -         122Y         117.55         -           58X         112.10         -         90Y         114.35         640         123X         117.60         -           58Y         112.15         -         91X         114.40         -         123Y         117.65         -           59X         112.20         -         91Y         114.45         642         124X         117.70         -           59Y         112.25         -         92X         114.50         -         124Y         117.75         -           60X         133.30         -         92Y         114.55         644         125X         117.80         -           60Y         133.35         -         93X         114.60         -         125Y         117.85         -           61X         133.40         -         93Y         114.65	55Y	111.85	616	88X	114.10	-	120Y	117.35	-
57X     112.00     -     89Y     114.25     638     122X     117.50     -       57Y     112.05     -     90X     114.30     -     122Y     117.55     -       58X     112.10     -     90Y     114.35     640     123X     117.60     -       58Y     112.15     -     91X     114.40     -     123Y     117.65     -       59X     112.20     -     91Y     114.45     642     124X     117.70     -       59Y     112.25     -     92X     114.50     -     124Y     117.75     -       60X     133.30     -     92Y     114.55     644     125X     117.80     -       60Y     133.35     -     93X     114.60     -     125Y     117.85     -       61X     133.40     -     93Y     114.65     646     126X     117.90     -       61Y     133.45     -     94X     114.75     648	56X	111.90	538	88Y	114.15	636	121X	117.40	-
57Y         112.05         -         90X         114.30         -         122Y         117.55         -           58X         112.10         -         90Y         114.35         640         123X         117.60         -           58Y         112.15         -         91X         114.40         -         123Y         117.65         -           59X         112.20         -         91Y         114.45         642         124X         117.70         -           59Y         112.25         -         92X         114.50         -         124Y         117.75         -           60X         133.30         -         92Y         114.55         644         125X         117.80         -           60Y         133.35         -         93X         114.60         -         125Y         117.85         -           61X         133.40         -         93Y         114.65         646         126X         117.90         -           62X         133.50         -         94Y         114.75         648	56Y	111.95	618	89X	114.20	-	121Y	117.45	-
58X         112.10         -         90Y         114.35         640         123X         117.60         -           58Y         112.15         -         91X         114.40         -         123Y         117.65         -           59X         112.20         -         91Y         114.45         642         124X         117.70         -           59Y         112.25         -         92X         114.50         -         124Y         117.75         -           60X         133.30         -         92Y         114.55         644         125X         117.80         -           60Y         133.35         -         93X         114.60         -         125Y         117.85         -           61X         133.40         -         93Y         114.65         646         126X         117.90         -           61Y         133.45         -         94X         114.75         648         126Y         117.95         -           62X         133.50         -         94Y         114.75         648         126Y         117.95         -	57X	112.00	-	89Y	114.25	638	122X	117.50	-
58Y     112.15     -     91X     114.40     -     123Y     117.65     -       59X     112.20     -     91Y     114.45     642     124X     117.70     -       59Y     112.25     -     92X     114.50     -     124Y     117.75     -       60X     133.30     -     92Y     114.55     644     125X     117.80     -       60Y     133.35     -     93X     114.60     -     125Y     117.85     -       61X     133.40     -     93Y     114.65     646     126X     117.90     -       61Y     133.45     -     94X     114.70     -     126Y     117.95     -       62X     133.50     -     94Y     114.75     648	57Y	112.05	-	90X	114.30	-	122Y	117.55	-
59X         112.20         -         91Y         114.45         642         124X         117.70         -           59Y         112.25         -         92X         114.50         -         124Y         117.75         -           60X         133.30         -         92Y         114.55         644         125X         117.80         -           60Y         133.35         -         93X         114.60         -         125Y         117.85         -           61X         133.40         -         93Y         114.65         646         126X         117.90         -           61Y         133.45         -         94X         114.70         -         126Y         117.95         -           62X         133.50         -         94Y         114.75         648         -	58X		-		114.35	640	123X		-
59Y     112.25     -     92X     114.50     -     124Y     117.75     -       60X     133.30     -     92Y     114.55     644     125X     117.80     -       60Y     133.35     -     93X     114.60     -     125Y     117.85     -       61X     133.40     -     93Y     114.65     646     126X     117.90     -       61Y     133.45     -     94X     114.70     -     126Y     117.95     -       62X     133.50     -     94Y     114.75     648	58Y	112.15	-	91X	114.40	-	123Y	117.65	-
60X     133.30     -     92Y     114.55     644     125X     117.80     -       60Y     133.35     -     93X     114.60     -     125Y     117.85     -       61X     133.40     -     93Y     114.65     646     126X     117.90     -       61Y     133.45     -     94X     114.70     -     126Y     117.95     -       62X     133.50     -     94Y     114.75     648	59X	112.20	-	91Y	114.45	642	124X	117.70	-
60Y     133.35     -     93X     114.60     -     125Y     117.85     -       61X     133.40     -     93Y     114.65     646     126X     117.90     -       61Y     133.45     -     94X     114.70     -     126Y     117.95     -       62X     133.50     -     94Y     114.75     648	59Y	112.25	-	92X	114.50	-	124Y	117.75	-
61X 133.40 - 93Y 114.65 646 126X 117.90 - 61Y 133.45 - 94X 114.70 - 126Y 117.95 - 62X 133.50 - 94Y 114.75 648	60X	133.30	-	92Y	114.55	644	125X	117.80	-
61Y 133.45 - 94X 114.70 - 126Y 117.95 - 62X 133.50 - 94Y 114.75 648	60Y	133.35	-	93X	114.60	-	125Y	117.85	-
62X 133.50 - 94Y 114.75 648	61X	133.40	-		114.65	646	126X	117.90	-
	61Y	133.45	-	94X	114.70	-	126Y	117.95	-
62Y 133.55 - 95X 114.80 -			-			648			
	62Y	133.55	-	95X	114.80	-			

# 35 COMM/NAV/WEATHER REMARKS:

These remarks consist of pertinent information affecting the current status of communications, NAVAIDs and weather.

OHIO 213

ADA (ØD7) 1 NW UTC-5(-4DT) N40°47.44′ W83°49.75′ **DETROIT** 

949 NOTAM FILE DAY **RWY 09-27:** 1955X110 (TURF)

RWY 09: Tree. RWY 27: Tree.

AIRPORT REMARKS: Unattended. Deer on and invof arpt. Ultralight activity on and invof arpt.

COMMUNICATIONS: CTAF/UNICOM 122.8

AIRBO N39°29.58′ W83°44.29′ NOTAM FILE ILN.

CINCINNATI

NDB (MHW/LOM) 407 IL  $217^{\circ}$  4.6 NM to Airborne Airpark. Unmonitored. Sat–Sun 2300-1100Z‡ and Sun 2300 til Mon 1200Z‡.

L-27E

#### AIRBORNE AIRPARK (See WILMINGTON)

#### **AKRON**

AKRON-CANTON RGNL (CAK) 10 SE UTC-5(-4DT) N40°54.97′ W81°26.53′

DETROIT H-10G I-29B

1228 B S4 FUEL 100LL, JET A 0X 1, 2 LRA Class I, ARFF Index B NOTAM FILE CAK RWY 01-19: H7601X150 (ASPH-GRVD) S-120, D-160, ST-175, DT-250 HIRL

RWY 01: MALSR.

**RWY 19:** MALSR. PAPI(P4L)—GA 3.0° TCH 53'. Thid dspicd 599'. **RWY 05-23:** H7597X150 (ASPH-GRVD) S-120, D-160, ST-175,

DT-230 HIRL 0.5% up NE

RWY 05: REIL. VASI(V4L)—GA 3.0° TCH 40'.
RWY 23: MALSR. VASI(V4L)—GA 3.0° TCH 48'. Trees.

LAND AND HOLD SHORT OPERATIONS

 LANDING
 HOLD SHORT POINT
 DIST AVBL

 RWY 05
 01-19
 4300

 RWY 19
 05-23
 3100

 RUNWAY DECLARED DISTANCE INFORMATION

RWY 01: TORA-7600 TODA-7600 ASDA-7000 LDA-7000

RWY 19: TORA-7600 TODA-7600 ASDA-7600 LDA-7000

AIRPORT REMARKS: Attended continuously. Rwy 05-23 southwest 1000'
CLOSED indef. Air carrier acft taxling on jet tech ramp and north
hangar areas not visible from twr. Deer and birds on and invof arpt.
One hr PPR for unscheduled air carrier ops with more than 9
passenger seats call airport manager 216-499-4059. ARFF svc
not avbl 0500-11002‡ except one hr PPR; call arpt manager. Rwy
01 runway visual range touchdown avbl. Flight Notification Service

(ADCUS) avbl.

WEATHER DATA SOURCES: ASOS (330) 966-9545.

COMMUNICATIONS: ATIS 121.05 UNICOM 122.95

- RCO 122.1R 114.4T (CLEVELAND RADIO)
- R APP/DEP CON 125.5 (007°-186°) 118.6 (187°-006°) 126.4 (1100-0500Z‡)
- (R) CLEVELAND CENTER APP/DEP CON 134.9 (0500-1100Z‡)

TOWER 118.3 GND CON 121.7 CLNC DEL 132.05

AIRSPACE: CLASS C svc 1100-0500Z‡ ctc APP CON other times CLASS D.

RADIO AIDS TO NAVIGATION: NOTAM FILE CAK.

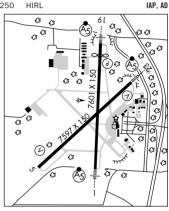
 $\hbox{(L) VOR/DME $114.4$} \quad \hbox{ACO} \quad \hbox{Chan $91$} \quad \hbox{N41°06.47' W81°12.09'} \quad 228° \ 15.9 \ \hbox{NM to fld. $1194/4W}.$ 

ILS 109.5 I-CAK Rwy 01. Class IA.

IL\$ 108.3 I-GGZ Rwy 23. Class IB. Glide slope unusable for coupled apchs below 1574'.

ILS 109.5 I-RGO Rwy 19. Class IE.

ASR



214

UHIU **AKRON FULTON INTL** (AKR) 0 S UTC-5(-4DT) N41°02.25′ W81°28.02′ 1067 B FUEL 100LL, JET A AOE NOTAM FILE AKR H-10G I-30G RWY 07-25: H6337X150 (ASPH) S-75, D-100, ST-127, DT-160 HIRL ΙΔΡ ΔΠ RWY 07: REIL. PAPI(P4L)—GA 3.3° TCH 53'. Thid dspicd 760'. ୍ଦିଓ 63 ¢ RWY 25: REIL. Thid dsplcd 262'. Trees. Ø a a co co 03 03 RWY 01-19: H2336X100 (ASPH) S-30 MIRL 43 O C3 RWY 01: Brush. RWY 19: Thid dspicd 190'. යි AIRPORT REMARKS: Attended 1100-0300Z‡. Deer on and invof rwys and twys. PPR for syc after hrs call arpt manager 330-864-2366. Rwy 07 REIL OTS indef. Rwy 07 PAPI OTS indef. ACTIVATE MIRL Rwy 01-19, HIRL Rwy 07-25, and REIL Rwys 07 and 25-CTAF. Flight Notification Service (ADCUS) available. an WEATHER DATA SOURCES: ASOS 126.825 (330) 724-4237. COMMUNICATIONS: CTAF/UNICOM 123.075 RCO 122.1R 114.4T (CLEVELAND RADIO) (R) AKRON-CANTON APP/DEP CON 118.6 (1100-0500Z‡) **CINC DFI 121 6** (R) CLEVELAND CENTER APP/DEP CON 120.775 (0500-1100Z±.) AIRSPACE: CLASS E svc continuous. RADIO AIDS TO NAVIGATION: NOTAM FILE CAK. (L) VOR/DME 114.4 ACO Chan 91 N41°06.47' W81°12.09' 255° 12.8 NM to fld. 1194/4W. NDB (MHW/LOM) 362 AK N41°04.19' W81°23.25' 249° 4.1 NM to fld. NOTAM FILE CLE. ILS/DME 110.9 I-AKR Chan 046 Rwy 25 LOM AKRON NDB. LOC only. DME unusable byd 25° left of course. Unmonitored when twr clsd. DME OTS indef. -----MAYFIELD (1D4) 5 SE UTC-5(-4DT) N40°59.55′ W81°25.91′ DETROIT 1100 TPA-2800(1700) NOTAM FILE CLE RWY 09-27: 2315X110 (TURF) RWY 09: Thid dspicd 180'. Trees. RWY 27: Thid dsplcd 590'. Trees. Rgt tfc. AIRPORT REMARKS: Attended irregularly. Rwy 09-27 marked with tires. Dsplcd thld marked with yellow tires. COMMUNICATIONS: CTAF 122.9 **OLD PORTAGE HELIPORT** (4P2) 4 NW UTC-5(-4DT) N41°08.27′ W81°32.95′ DETROIT 760 NOTAM FILE CLE HELIPAD H1: 100X100 (TURF) HELIPORT REMARKS: Unattended. Helipad H1 +82' to +46' tree along with +17' building and +30' p-line near pad.

SCHMELTZER HELIPORT (6D5) 7 NW UTC-5(-4DT) N41°08.84′ W81°39.62′

DETROIT

992 NOTAM FILE CLE HELIPAD H1: 50X50 (TURF)

HELIPORT REMARKS: Attended irregularly. Helipad H1 +83' trees 75' east and south of pad.

COMMUNICATIONS: CTAF 122.9

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OHIO ALBANY (See ATHENS/ALBANY) ALDERMAN (See ST CLAIRSVILLE) ALEXANDER SALAMON (See WEST UNION) **ALLEN CO** N40°42.43′ W83°58.09′ NOTAM FILE DAY. DETROIT (T) VOR 108.4 AOH 274° 2.7 NM to Lima Allen Co. ASOS. L-23C VOR portion unusable 091°-109° byd 20 NM. RCO 122.1R 108.4T (DAYTON RADIO) **ALLIANCE** BARBER (2D1) 3 N UTC-5(-4DT) N40°58.25′ W81°05.99′ DETROIT 1062 S4 FUEL 100LL NOTAM FILE CLE RWY 18-36: 3500X80 (TURF) RWY 18: Trees. RWY 36: Trees. RWY 09-27: 2088X130 (TURF) RWY 09: P-line. RWY 27: Trees. AIRPORT REMARKS: Attended 1300Z±-dusk, Arpt CLOSED Mon except with PPR, Parachute ops within 5 NM, sfc to 18,000' MSL, check Akron-Canton Rgnl apch. Parachute Jumping. Aerobatic practice area within 1 NM, surface-5000' MSL, hrs irregular, check NOTAMS. CAUTION: Occasional ground level aerobatic practice. CAUTION when rwys are wet. Use care—model acft in area, Rwy 09-27 NSTD lgts not for public use, PPR for ngt and winter ops call arpt manager 330-823-0652/or cell phone 330-495-5447. Rwy 09-27 and Rwy 18-36 marked with cones COMMUNICATIONS: CTAF 122 9 MILLER (4G3) 5 NE UTC-5(-4DT) N40°58.91′ W81°02.53′ DETROIT 1-306 1070 B FUEL 100LL NOTAM FILE CLE IAP RWY 09-27: H2912X50 (ASPH) S-9 LIRL 0.4% up E. RWY 09: REIL. Thid dsplcd 180'. Trees. RWY 27: REIL. Thid dsplcd 288'. Trees. AIRPORT REMARKS: Unattended. After hrs ctc manager Bill Barrett 330-718-1777. Parachute Jumping. Rwy 09 thld dspld 175' for ngt ops only. ACTIVATE LIRL Rwy 09-27 and bcn-CTAF. COMMUNICATIONS: CTAF/UNICOM 122.8 (R) AKRON-CANTON APP/DEP CON 125.5 (1100-0500Z‡) R CLEVELAND CENTER APP/DEP CON 120.775 (0500-1100Z‡) RADIO AIDS TO NAVIGATION: NOTAM FILE CAK. AKRON (L) VOR/DME 114.4 ACO Chan 91 N42°06.47′ W81°12.09′ 140° 10.5 NM to fld. 1194/4W. APPLETON N40°09.06′ W82°35.30′ NOTAM FILE DAY. DETROIT (H) VORTAC 116.7 APE Chan 114 148° 9.6 NM to Newark-Heath. 1350/6W. HIWAS. H-10G, L-29A VOR portion unusable 360°-080°. RCO 122.1R 116.7T (DAYTON RADIO) ASHLAND CO (3G4) 3 NE UTC-5(-4DT) N40°54.18′ W82°15.34′ DETROIT 1206 B S2 FUEL 100LL, JET A NOTAM FILE CLE I-29A RWY 01-19: H3502X75 (ASPH) MIRL 0.5% up S. RWY 01: REIL. PAPI(P4L). Trees. RWY 19: REIL. VASI(V2L). Trees. AIRPORT REMARKS: Attended 1300Z‡-dusk. Occasional deer on and invof arpt. Rwy 19 REIL OTS indef. Rwy 19 VASI OTS indef. ACTIVATE MIRL Rwy 01-19; REIL Rwy 01 and Rwy 19, PAPI Rwy 01 and VASI Rwy 19-CTAF. COMMUNICATIONS: CTAF/UNICOM 122.7 R MANSFIELD APP/DEP CON 124.2 (1100-0400Z‡) RCLEVELAND CENTER APP/DEP CON 134.9 (0400-1100Z‡) RADIO AIDS TO NAVIGATION: NOTAM FILE MFD. MANSFIELD (L) VORTAC 108.8 MFD Chan 25 N40°52.12′ W82°35.46′ 085° 15.4 NM to fld. 1210/3W. NDB (MHW) 329 AAU N40°57.80′ W82°15.20′ 189° 3.6 NM to fld. NOTAM FILE CLE. NDB unmonitored ngts

indef.

216 OHIO

**ASHTABULA CO** (HZY) 8 SE UTC-5(-4DT) N41°46.68′ W80°41.73′

RWY 08-26: H5197X100 (ASPH) S-40, D-53 MIRL 0.3% up E

924 B S3 FUEL 100LL, JET A1+ NOTAM FILE HZY

RWY 08: REIL. PAPI(P4L)-GA3.0° TCH 27'. Trees.

RWY 26: REIL. PAPI(P4L)-GA 3.0° TCH 26'. Trees. AIRPORT REMARKS: Attended 1400-2200Z‡. Unattended New Years Day and Christmas Day. 24 hr credit card self service 100LL Fuel. 000000 a ACTIVATE MIRL Rwy 08-26, PAPI Rwy 08 and Rwy 26 and REIL O C 0 0 0 0 €3 Rwy 08 and Rwy 26-123.3. 00 ദേദ് G G G G €3 ~ G G G WEATHER DATA SOURCES: ASOS 118.325 (440) 576-6907. 0 0 0 C3 CM COMMUNICATIONS: CTAF/UNICOM 122.8 0 0 0 0 JEFFERSON RCO 122.1R 115.2T (CLEVELAND RADIO) ERIE APP/DEP CON 121.0 (1100-0500Z±) CLEVELAND CENTER APP/DEP CON 132.4 (0500-1100Z‡) රා රා රා GCO 121.725 (ERIE CLNC) RADIO AIDS TO NAVIGATION: NOTAM FILE CLE. G GG GG G G JEFFERSON (L) VOR/DME 115.2 JFN Chan 99 N41°45.61' W80°44.89' 070° 2.6 NM to fld. 900/5W. ଅନ୍ତ ଓ ଓଡ଼ିଆ ଓ <sup>ଓଡ଼ି</sup> G G COMM/NAV/WEATHER REMARKS: GCO avbl on freg 121.725 ERI CLNC DEL. 00000000 Click 4 times for ERI tower and 6 times for Cleveland RADIO. GCO 0000000 OTS indef ATHENS-ALBANY N39°12.66′ W82°13.89′ CINCINNATI RCO 122.25 (DAYTON RADIO) L-29B ATHENS/ALBANY OHIO UNIVERSITY SNYDER FLD (UNI) 10 SW UTC-5(-4DT) N39°12.71′ W82°13.76′ CINCINNATI 766 B S4 FUEL 100LL, JET A OX 1 TPA (See remarks) NOTAM FILE DAY H-10G, L-29B RWY 07-25: H5600X100 (ASPH) S-30 MIRL IAP RWY 07: REIL, PAPI(P4R)—GA 3.0° TCH 25', Thid dsplcd 900', Trees. RWY 25: REIL. PAPI(P4L)-GA 3.0° TCH 50'. Trees. AIRPORT REMARKS: Attended continuously. Deer and waterfowl invof arpt. TPA—turbine acft (except helicopters) 2300(1534), multiengine reciprocating 2000(1234), all others 1800(1034), Rwy 07-25 left traffic only. Extensive flight training, make every effort to observe traffic pattern altitudes. Avoid overflight of noise sensitive areas, church 1.8 mi NW of Rwy 25 end and village of Albany 2 mi E of apch end Rwy 25. Rwy 07 REILS located 949' from rwy end. ACTIVATE MIRL Rwy 07-25 and REIL Rwy 07 and Rwy 25-CTAF. PAPI Rwy 07 and Rwy 25 opr 24 hrs. WEATHER DATA SOURCES: AWOS-3 128,325 (740) 597-2687 TF 1-888-682-4799. COMMUNICATIONS: CTAF/UNICOM 123.075 ATHENS-ALBANY RCO 122.25 (DAYTON RADIO) R HUNTINGTON APP/DEP CON 120.95 CLNC DEL 120.95 RADIO AIDS TO NAVIGATION: NOTAM FILE EKN. HENDERSON (H) VORTAC 115.9 HNN Chan 106 N38°45.25′ W82°01.57′ 344° 29 NM to fld. 880/3W. UNIVERSITY NDB (MHW) 250 UGS N39°15.44′ W82°07.56′ 247° 5.5 NM to fld. NOTAM FILE DAY. ILS 108.75 Rwy 25. I-UNI Class IB. LOC unusable inside .5 NM. BALTIMORE MILLER FARM LANDING STRIP (7B4) 3 NE UTC-5(-4DT) N39°53.07′ W82°35.34′ CINCINNATI NOTAM FILE DAY RWY 09-27: 3250X50 (TURF) LIRL (NSTD) RWY 27: Thid dsplcd 275'. Trees. RWY 09: Thid dspicd 270'. Trees. AIRPORT REMARKS: Attended continuously. For rwy lgts call 614-862-6053. No student ops, no touch and go. Rwy 09-27 NSTD LIRL: rwy ends lgtd with 360° red lgts and dsplcd thlds lgtd with 1 360° green lgt each side of rwy. COMMUNICATIONS: CTAF 122.9 BANNOCK HELIPORT (2D6) O N UTC-5(-4DT) N40°06.42′ W80°58.52′ DETROIT 1100 NOTAM FILE CLE

DETROIT

ΙΔΡ

H-10G, L-30G

HELIPORT REMARKS: Attended Mon-Fri 1300-2100Z‡. Helipad H1 NSTD markings.

HELIPAD H1: H20X20 (CONC) HELIPAD H1: Antenna.

COMMUNICATIONS: CTAF 122.9

BARBER (See ALLIANCE)

UHIU 217

BARNESVILLE—BRADFIELD (6G5) 1 NW UTC-5(-4DT) N40°00.15' W81°11.51' DETROIT 1312 B S4 FUEL 100LL, JET A NOTAM FILE CLE L-29B RWY 09-27: H4004X65 (ASPH) S-30 MIRL IAP RWY 09: Thid dspicd 299'. Road. RWY 27: RFII Trees AIRPORT REMARKS: Attended dalgt hrs. Deer and other wildlife on and

COMMUNICATIONS: CTAF/UNICOM 123.0

27—CTAF

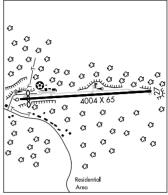
BELLAIRE RCO 122.1R 117.1T (CLEVELAND RADIO)

CLEVELAND CENTER APP/DEP CON 120.4

RADIO AIDS TO NAVIGATION: NOTAM FILE CLE.

BELLAIRE (H) VOR/DME 117.1 AIR Chan 118 N40°01.02' W80°49.04' 274° 17.3 NM to fld. 1290/7W.

invof arpt. ACTIVATE rotating bcn, MIRL Rwy 09-27 and REIL Rwy



### BATAVIA

CLERMONT CO (169) 2 W UTC-5(-4DT) N39°04.70′ W84°12.61′ 843 B S4 FUEL 100LL, JET A TPA-1843(1000) NOTAM FILE DAY CINCINNATI L-27E

ΙΔΡ

RWY 04-22: H3566X75 (ASPH) MIRL 0.9% up SW

RWY 04: REIL, PAPI(P2L)—GA 4.0°. Thid dsplcd 396'. Road. RWY 22: REIL(NSTD), PAPI(P2L)—GA 3.0°, Trees.

AIRPORT REMARKS: Attended Mon-Thu 1400Z±-dusk, Fri-Sat 1400-2200Z±, Sun 1600Z±-dusk, Deer and other animals on and invof arpt, ACTIVATE MIRL Rwy 04-22, PAPI and REIL Rwy 04 and Rwy 22-CTAF. Taxi on hard surface only.

COMMUNICATIONS: CTAF/UNICOM 122.975

(R) CINCINNATI APP/DEP CON 121 0 CINC DEL 124 9

RADIO AIDS TO NAVIGATION: NOTAM FILE LOU.

FALMOUTH, KY (H) VOR/DME 117.0 FLM Chan 117 N38°38.97′ W84°18.64′ 014° 26.1 NM to fld. 810/4W. **SPORTYS NDB (MHW)** 245 PWF N39°04.06′ W84°12.92′ at fld. NOTAM FILE DAY. NDB unusable byd 15 NM.

BEACH CITY (2D7) 1 E UTC-5(-4DT) N40°38.80′ W81°33.37′ DETROIT L-29B IAD

RWY 10-28: 3175X115 (TURF) LIRL (NSTD) 0.5% up E

984 B TPA-1800(816) NOTAM FILE CLE

RWY 10: REIL. VASI(V2L). Thid dsplcd 425'. P-line. RWY 28: REIL. VASI(V2R). Thid dsplcd 734'. P-line.

AIRPORT REMARKS: Attended irregularly. No ultralight acft 1 NM radius. Rwy 10-28 NSTD LIRL; dsplcd thlds unlighted. ACTIVATE NSTD LIRL Rwy 10-28, Rwy 10 REIL and REIL Rwy 28, and rotating bcn-122.85. Rwy 10-28 dsplcd thid marked with thid lgts on 1' day glo red containers. Rwy 10-28 numbers incorrect.

COMMUNICATIONS: CTAF/UNICOM 122.8

(R) AKRON-CANTON APP/DEP CON 125.5 (1100-0500Z‡) RADIO AIDS TO NAVIGATION: NOTAM FILE CLE.

RCLEVELAND CENTER APP/DEP CON 134.9 (0500-1100Z‡)

NEWCOMERSTOWN (L) VOR/DME 111.8 CTW Chan 55 N40°13.75′ W81°28.59′ 359° 25.3 NM to fld. 1180/7W. HIWAS.

**BELLAIRE** N40°01.02′ W80°49.04′ NOTAM FILE CLE.

DETROIT H-10G. L-29B

(H) VOR/DME 117.1 AIR Chan 118 274° 17.3 NM to Barnesville—Bradfield, 1290/7W.

VOR portion unusable 329°-349° below 6000'.

RCO 122.1R 117.1T (CLEVELAND RADIO)

218 OHIO

BELLEFONTAINE RGNL (EDJ) 3 W UTC-5(-4DT) N40°22.34′ W83°49.16′ DETROIT 1122 B S2 FUEL 100LL, JET A1+ NOTAM FILE DAY 1-27F RWY 07-25: H4999X100 (ASPH) MIRL 0.4% up NE RWY 07: REIL. PAPI(P4L)—GA 3.0° TCH 40'. P-line. RWY 25: REIL, PAPI(P4L)—GA 4.0° TCH 57', Fence. AIRPORT REMARKS: Attended Mon-Fri 1300Z‡-dusk, Sat-Sun 1300-2200Z‡. ACTIVATE MIRL Rwy 07-25, PAPI Rwys 07, 25 and REIL Rwys 07 and 25-CTAF. WEATHER DATA SOURCES: AWOS-3 118.075 (937) 599-4654. COMMUNICATIONS: CTAF/UNICOM 122.8 (R) DAYTON APP/DEP CON 118.425 (360°-090°) RADIO AIDS TO NAVIGATION: NOTAM FILE DAY. ROSEWOOD (H) VORTAC 117.5 ROD Chan 122 N40°17.27′ W84°02.59′ 069° 11.5 NM to fld. 1080/5W. NDB (MHW) 242 EDJ N40°22.26′ W83°48.83′ at fld. NOTAM FILE DAY. COMM/NAV/WEATHER REMARKS: AWOS-3 visibility and precipitation unreliable. BENTON RIDGE N41°01.27′ W83°40.15′ NOTAM FILE FDY. DETROIT NDB (MHW) 334 BNR at Findlay, Unmonitored. L-28J BLOOM (See JAMESTOWN) **BLUFFTON** (5G7) 1 SE UTC-5(-4DT) N40°53.13′ W83°52.12′ DETROIT 851 B S4 FUEL 100LL, JET A TPA-1851(1000) NOTAM FILE CLE L-27E RWY 05-23: H4126X75 (ASPH) S-12.5 MIRL ΙΔΡ RWY 23: REIL. PAPI(P4L). Trees. AIRPORT REMARKS: Attended 1300-2300Z‡. PAEW 1300-2200Z‡ Mon-Fri. Twy marked with reflectors. ACTIVATE MIRL Rwy 05-23 and PAPI Rwy 23 REIL Rwy 23-CTAF. COMMUNICATIONS: CTAF/UNICOM 122.8 R TOLEDO APP/DEP CON 120.8 RADIO AIDS TO NAVIGATION: NOTAM FILE FDY. FINDLAY (L) VORTAC 108.2 FDY Chan 19 N40°57.32′ W83°45.36′ 233° 6.6 NM to fld. 820/2W. COMM/NAV/WEATHER REMARKS: Unicom monitored irregularly. BOLTON FLD (See COLUMBUS) BORDNER (See BOWLING GREEN) **BOUTN** N39°49.16′ W83°12.29′ NOTAM FILE DAY. CINCINNATI NDB (MHW/LOM) 230 BU 038° 5.8 NM to Bolton Fld. Unmonitored when twr clsd. 1-29A NDB unusable 355°-010° beyond 15 NM. **BOWLING GREEN** BORDNER (3D8) 4 SW UTC-5(-4DT) N41°20.16′ W83°43.39′ DETROIT 690 NOTAM FILE CLE RWY 09-27: 2703X30 (TURF) S-5 LIRL RWY 09: P-line. Rgt tfc. RWY 27: Trees. AIRPORT REMARKS: Unattended. Parachute Jumping. Arpt CLOSED indef. For LIRL Rwy 09-27 call 419-352-5200. COMMUNICATIONS: CTAF 122.9 WOOD CO (1GØ) 1 NE UTC-5(-4DT) N41°23.46′ W83°37.81′ DETROIT 673 B FUEL 100LL, JET A TPA-1700(1027) NOTAM FILE CLE 1-281 RWY 10-28: H4199X75 (ASPH) MIRL IAP RWY 10: REIL. PAPI(P4L). RWY 28: REIL. PAPI(P4L). Rgt tfc. RWY 18-36: H2628X50 (ASPH) MIRL RWY 18: PAPI(P4L). RWY 36: Thid dspicd 57'. Road. Rgt tfc. AIRPORT REMARKS: Attended Nov-Apr 1300-2300Z±, May-Oct 1300-0000Z±, Flocks of geese on and invof arpt during fall and winter. 160' AGL stadium lgts .6 NM SE of arpt. Rwy 28 is the calm wind rwy. Rwy 10 REIL OTS indef. Rwy 10 VASI OTS indef. ACTIVATE MIRL Rwy 10-28 and 18-36; REIL Rwy 10 and Rwy 28 and PAPI Rwy 18-CTAF. WEATHER DATA SOURCES: AWOS-3 120.725 (419) 354-1415. COMMUNICATIONS: CTAF/UNICOM 122.8 (R) TOLEDO APP/DEP CON 126.1 CLNC DEL 125.6 RADIO AIDS TO NAVIGATION: NOTAM FILE CLE. WATERVILLE (L) VOR/DME 113.1 VWV Chan 78 N41°27.09′ W83°38.32′ 176° 3.7 NM to fld. 660/2W. BRACEVILLE (See NEWTON FALLS)

UHIU 219

BRIGGS N40°44.44′ W81°25.93′ NOTAM FILE CLE.

(L) VOR/DME 112.4 BSV Chan 71 182° 16.2 NM to Harry Clever Fld. 1230/4W.

DETROIT H-10G I-29B

VOR portion unusable 214°-229° blo 3000' between 3-7 NM. DME portion unusable 105°-140° byd 20 NM blo 3500'

RCO 122.1R 112.4T (CLEVELAND RADIO)

#### **BROOKFIELD**

KIRILA HELIPORT (4D5) 1 SE UTC-5(-4DT) N41°13.80′ W80°33.44′

DETROIT

1140 FUEL JET A NOTAM FILE CLE

HELIPAD H1: 300X300 (TURF)

HELIPORT REMARKS: Attended continuously, Trees N. Wires E. Helipad H1 not marked, Make apphs to turf helipad (H1): Transition to asph apron for fuel.

COMMUNICATIONS: CTAF 122.9

**BROOKVILLE AIR-PARK** (I62) 2 NW UTC-5(-4DT) N39°51.75′ W84°26.00′

CINCINNATI

S4 FUEL 100LL NOTAM FILE DAY

RWY 09-27: H2500X30 (ASPH) LIRL

RWY 09: Road. RWY 27: Trees. AIRPORT REMARKS: Attended 1300Z‡-dark. Deer on and invof arpt. 100LL fuel avbl 24 hrs with credit card. Rwy 09-27 pavement condition-weathered, loose aggregate, broken pavement. ACTIVATE LIRL Rwy 09-27-122.8.

COMMUNICATIONS: CTAF/UNICOM 122.8

DAYTON APP/DEP CON 134.45 (181°-359°)

BROWN CO (See GEORGETOWN)

BRUNY N39°50.82′ W84°20.09′ NOTAM FILE DAY.

CINCINNATI

NDB (LOM) 315 AT 062° 6.3 NM to fld. James M Cox Dayton Intl.

**BRYAN** N41°28.79′ W84°27.96′ NOTAM FILE CLE.

DETROIT L-28J

NDB (MHW) 260 BYN 252° 2 NM to Williams Co.

**BRYAN** 

WILLIAMS CO (ØG6) 2 E UTC-5(-4DT) N41°28.04′ W84°30.41′

DETROIT L-28J

IAP

730 B FUEL 100LL, JET A NOTAM FILE CLE RWY 07-25: H4781X75 (ASPH) S-30 LIRL

RWY 25: REIL. Thid dspicd 629'. Road.

RWY 07: REIL. SAVASI(S2L). Thid dsplcd 296'. Trees. AIRPORT REMARKS: Attended Apr-Nov 1300-2330Z‡, Dec-Mar 1300-2230Z‡. Occasional deer on and invof arpt. Rwy 07 VASI OTS indef. ACTIVATE REIL Rwy 07-25-123.0.

COMMUNICATIONS: CTAF/UNICOM 122.8

LITCHFIELD RCO 122.1R 111.2T (LANSING RADIO)

R TOLEDO APP/DEP CON 134.35

RADIO AIDS TO NAVIGATION: NOTAM FILE LAN.

LITCHFIELD (L) VOR/DME 111.2 LFD Chan 49 N42°03.75′ W84°45.91′ 167° 37.5 NM to fld. 1040/05W.

BRYAN NDB (MHW) 260 BYN N41°28.79′ W84°27.96′ 252° 2 NM to fld. NOTAM FILE CLE.

BUCKEYE N40°37.00′ W83°03.83′ NOTAM FILE MNN.

DETROIT

(T) VORW 109.8 BUD at Marion Muni.

L-29A

220 OHIO

#### BUCYRUS

**PORT BUCYRUS-CRAWFORD CO** (17G) 1 S UTC-5(-4DT) N40°46.89′ W82°58.49′

1003 B S4 **FUEL** 100LL NOTAM FILE CLE **RWY 04-22**: H3895X75 (ASPH) S-17.1, D-35 MIRL

RWY 04: REIL. PAPI(P4L). Thid dspicd 277'. Trees.

RWY 22: REIL. SAVASI(S2L). Road.

RWY 09-27: 2900X75 (TURF) 0.4% up E

RWY 09: Pole. RWY 27: Tree.

AIRPORT REMARKS: Attended Apr-Oct 1300-2300Z‡, Nov-Mar 1300-2200Z‡.

WEATHER DATA SOURCES: AWOS-3 126.625 (419) 562-0297.
COMMUNICATIONS: CTAF/UNICOM 122.8

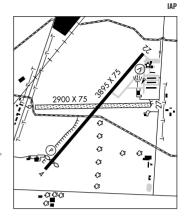
(R) MANSFIELD APP/DEP CON 124.2 (1100-0400Z‡)

R CLEVELAND CENTER APP/DEP CON 134.9 (0400-1100Z‡)

RADIO AIDS TO NAVIGATION: NOTAM FILE MFD.

MANSFIELD (L) VORTAC 108.8 MFD Chan 25 N40°52.12′ W82°35.46′ 257° 18.3 NM to fld. 1210/3W.

BUCKEYE (T) VORW 109.8 BUD N40°37.00′ W83°03.83′ 027°



BURKE LAKEFRONT (See CLEVELAND)

BUTLER CO RGNL (See HAMILTON)

**CADIZ** N40°14.20′ W81°00.79′ NOTAM FILE CLE.

NDB (MHW) 239 CFX at Harrison Co. Unmonitored. VFR only. Out of svc indefinitely.

DETROIT

DETROIT

DETROIT

L-29A

#### CADIZ

HARRISON CO (8G6) 2 S UTC-5(-4DT) N40°14.30′ W81°00.77′

1174 B S4 FUEL 100LL NOTAM FILE CLE

**RWY 13-31**: H3765X75 (ASPH) S-30 MIRL 1.9% up NW

RWY 13: PAPI(P2L). Thid dsplcd 876'. Hill.

RWY 31: PAPI(P2L). Thid dspicd 168'. Tree.

AIRPORT REMARKS: Attended 1400–2200Z‡. Rwy 13–31 asphalt poor due to large cracks, vegetation and weathering. Rwy 31 VASI OTS indef. ACTIVATE MIRL Rwy 13–31 and PAPI Rwy 13 and Rwy 31—CTAF. Rotating bon OTS indef.

COMMUNICATIONS: CTAF/UNICOM 122.8

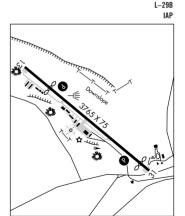
R CLEVELAND CENTER APP/DEP CON 120.4

RADIO AIDS TO NAVIGATION: NOTAM FILE HLG.

WHEELING (L) VOR/DME 112.2 HLG Chan 59 N40°15.59′ W80°34.12′ 274° 20.5 NM to fld. 1269/07W.

CADIZ NDB (MHW) 239 CFX N40°14.20' W81°00.79' at fld. NOTAM FILE CLE. Unmonitored. VFR only.

Out of svc indefinitely.



OHIO 221

CALDWELL NOBLE CO (I1Ø) 3 N UTC-5(-4DT) N39°48.06′ W81°32.18′ CINCINNATI 879 B FUEL 100LL NOTAM FILE CLE L-29B RWY 05-23: H3811X65 (ASPH) S-12.5 MIRL ΙΔΡ RWY 05: PAPI(P2L), Trees. RWY 23: PAPI(P2L). Thid dsplcd 413'. Trees. AIRPORT REMARKS: Attended Mon-Fri 1400-2100Z‡, Sat-Sun irregularly. For fuel after hrs call 740-525-9901 or 740-581-1167. Model acft activity on arpt-Sundays. ACTIVATE MIRL Rwy 05-23 and rotating bcn-122.7. Red obstruction Igts mark 56' hill 947' from AER 23. COMMUNICATIONS: CTAF/UNICOM 122.8 (R) INDIANAPOLIS CENTER APP/DEP CON 124.45 RADIO AIDS TO NAVIGATION: NOTAM FILE CLE. ZANESVILLE (L) VOR/DME 111.4 ZZV Chan 51 N39°56.45′ W81°53,56′ 123° 18.5 NM to fld. 900/6W. CAMBRIDGE CAMBRIDGE MUNI (CDI) 03 S UTC-5(-4DT) N39°58.50′ W81°34.66′ CINCINNATI 799 B S2 FUEL 100LL TPA-1799(1000) NOTAM FILE CLE L-29B RWY 04-22: H4298X75 (ASPH) S-18.5 MIRL RWY 04: REIL. VASI(V2L)—GA 3.5°. Thid dsplcd 400'. Pole. RWY 22: REIL. VASI(V2L)-GA 3.5°. P-line. AIRPORT REMARKS: Attended Mon-Fri 1300-2300Z‡. Sat-Sun 1300-2200Z‡. Geese and deer invof rwy. Rwy 22 REIL OTS indef. Rwy 04 obstn lgtd hills SW of arpt. ACTIVATE MIRL Rwy 04-22; REIL Rwy 04 and Rwy 22-CTAF. WEATHER DATA SOURCES: AWOS-3 118.525 (740) 435-0086. COMMUNICATIONS: CTAF/UNICOM 123.075 (R) INDIANAPOLIS CENTER APP/DEP CON 124.45 (West side ops VOR or GPS A for arrival) R CLEVELAND CENTER APP/DEP CON 120.4 (East side ops LOC/DME Rwy 22 for arrival) RADIO AIDS TO NAVIGATION: NOTAM FILE ZZV. ZANESVILLE (L) VOR/DME 111.4 ZZV Chan 51 N39°56.45′ W81°53.56′ 088° 14.7 NM to fld. 900/6W. ILS/DME 109.35 I-CZM Chan 30 (Y) Rwy 22. LOC only. DME unmonitored. **SALT FORK LODGE HELIPORT** (Ø8G) 6 NE UTC-5(-4DT) N40°06.66′ W81°31.57′ DETROIT 960 NOTAM FILE CLE. HELIPAD H1: H60X56 (ASPH) HELIPORT REMARKS: Unattended COMMUNICATIONS: CTAF 122.9 CANTON STARK COUNTY SHERIFF HELIPORT (5D1) 4 E UTC-5(-4DT) N40°50.39′ W81°18.49′ DETROIT NOTAM FILE CLE HELIPAD H1: H120X75 (ASPH) HELIPORT REMARKS: Attended continuously. Ingress-Egress 270° clockwise 090° from PAD. Helipad H1 marked with COMMUNICATIONS: CTAF 122.9 CARL R KELLER FLD (See PORT CLINTON) CARROLL CO-TOLSON (See CARROLLTON) CARROLLTON CARROLL CO-TOLSON (TSO) 1 SE UTC-5(-4DT) N40°33.71′ W81°04.65′ DETROIT 1163 B S4 FUEL 100LL. JET A TPA-2013(850) NOTAM FILE CLE L-29B RWY 07-25: H4300X75 (ASPH) MIRL RWY 25: REIL. PAPI(P2L). Tree. RWY 07: REIL. PAPI(P2L). Tree. AIRPORT REMARKS: Attended 1100-0000Z‡. 24 hr fuel avbl with credit card. Deer on and invof arpt. ACTIVATE MIRL Rwy 07-25 and REIL Rwys 07 and 25-CTAF. COMMUNICATIONS: CTAF/UNICOM 122.7 (R) AKRON-CANTON APP/DEP CON 125.5 (1100-0500Z±) (R) CLEVELAND CENTER APP/DEP CON 120.6 (0500-1100Z‡) RADIO AIDS TO NAVIGATION: NOTAM FILE CLE. NEWCOMERSTOWN (L) VOR/DME 111.8 CTW Chan 55 N40°13.75′ W81°28.59′ 049° 27.1 NM to fld. 1180/7W.

222 UHIU

PARSONS (5D6) 5 N UTC-5(-4DT) N40°38.89′ W81°04.12′ DETROIT

1290 S2 NOTAM FILE CLE

RWY 09-27: 2530X75 (TURF)

RWY N9. Trees RWY 27: Tree.

AIRPORT REMARKS: Attended irregularly. Deer and birds on and invof arpt. Rwy 09-27 slopes up to the W. Rwy soft when wet. No line of sight between rwy ends. Aerobatic practice area 2280' MSL to 5000' MSL within 1 mile radius of arpt. Rwy 09 outlined with orange and white barrel halves and yellow tires at rwy end.

COMMUNICATIONS: CTAF 122.9

**CASER** N39°44.93′ W82°32.12′ NOTAM FILE DAY.

CINCINNATI

DETROIT

1-27F

IΛP

**CELINA** 

NDB (LOM) 338 LH 280° 5.7 NM to Fairfield Co. Unmonitored.

LAKEFIELD (CQA) 6 SE UTC-5(-4DT) N40°29.06′ W84°33.49′

B FUEL 100LL, JET A1+ NOTAM FILE DAY RWY 08: REIL. PAPI(P4L)—GA 3.0° TCH 20'. P-line.

RWY 08-26: H4400X75 (ASPH) S-30 MIRL

RWY 26: REIL. PAPI (P4L)-GA 3.0° TCH 29'. Tree.

AIRPORT REMARKS: Attended 1330Z‡-dusk. 100LL fuel 24 hr with credit card self svc. After hrs call ahead for Jet A service. Parachute Jumping. ACTIVATE MIRL Rwy 08-26 and REIL Rwy 08-26-123.3.

COMMUNICATIONS: CTAF/UNICOM 122.8

R DAYTON APP/DEP CON 134.45 (181°-359°)

RADIO AIDS TO NAVIGATION: NOTAM FILE DAY.

ROSEWOOD (H) VORTAC 117.5 ROD Chan 122 N40°17.27′ W84°02.59′ 302° 26.4 NM to fld. 1080/5W.

NDB (MHW) 205 COA N40°28.92' W84°33.86'

DETROIT

CHARDON N41°31.02′ W81°09.79′ (H) VOR/DME 112.7 CXR Chan 74 137° 6.1 NM to Geauga Co. 1310/5W.

NOTAM FILE CLE.

H-10G, L-30G

VOR portion unusable

357°-073° byd 10 NM blo 11,000'

085°-099° byd 10 NM blo 11,000′ 104°-180° bvd 10 NM 6000′

074°-084° bvd 10 NM blo 3.300′ RCO 122.1R 112.7T (CLEVELAND RADIO)

CHESAPFAKE/HUNTINGTON W VA

LAWRENCE CO AIRPARK (HTW) 2 W UTC-5(-4DT) N38°25.15′ W82°29.66′

CINCINNATI L-26H

B FUEL 100LL NOTAM FILE DAY RWY 08-26: H3001X70 (ASPH) MIRL (NSTD)

RWY 08: Thid dspicd 173'. Trees. RWY 26. Trees

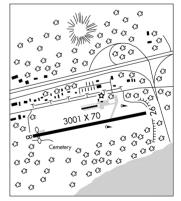
AIRPORT REMARKS: Attended Oct-Apr 1400Z‡-dusk, May-Sep

1300Z‡-dusk. Parachute Jumping. Rwy 08-26 has many cracks, exhibits foreign object damage. Rwy 08-26 NSTD MIRL 70' from rwy edges; Rwy 08 relocated thid 28' at ngt; 2973' lgtd at ngt.

COMMUNICATIONS: CTAF/UNICOM 122.7

RADIO AIDS TO NAVIGATION: NOTAM FILE LOU.

YORK (L) VORTAC 112.8 YRK Chan 75 N38°38.65' W82°58.70' 125° 26.5 NM to fld. 1040/5W.



OHIO 223

#### CHILLICOTHE

ROSS CO (RZT) 6 NW UTC-5(-4DT) N39°26.43′ W83°01.38′

CINCINNATI

725 B S4 **FUEL** 100LL, JET A NOTAM FILE DAY

H-10G, L-29A

**RWY 05–23**: H5404X100 (ASPH) S–30, D–60 MIRL 0.4% up SW

IΔP

**RWY 05:** REIL. PAPI(P4L)—GA 3.0° TCH 44′. Tree. **RWY 23:** REIL. PAPI(P4L)—GA 3.0° TCH 45′. Trees.

RWY 12-30: 3130X125 (TURF)

RWY 12: Thid dsplcd 330'. P-line. RWY 30: Trees.

AIRPORT REMARKS: Attended 1300Z‡-dusk. Rwy 12–30 CLOSED indef. Avionics Shop on fld. MIRL Rwy 05–23 preset on low ints; to increase ints and ACTIVATE PAPI and REIL Rwys 05 and 23—123.0. Rwy 05–23 555' SW end marked with Chevrons is unusable.

WEATHER DATA SOURCES: AWOS-3 119.225 (740) 779-1364. SAWRS

COMMUNICATIONS: CTAF/UNICOM 122.8

YELLOW BUD RCO 122.1R 112.5T (DAYTON RADIO)

R COLUMBUS APP/DEP CON 132.3

RADIO AIDS TO NAVIGATION: NOTAM FILE DAY.

APPLETON (H) VORTAC 116.7 APE Chan 114 N40°09.06′ W82°35.30′ 211° 47.1 NM to fld. 1350/6W. HIWAS.

YELLOW BUD (T) VOR 112.5 XUB N39°31.61′ W82°58.68′ 207° 5.6 NM to fld.

NDB (MHW) 236 RZT N39°26.29' W83°01.73' at fld.

NDB unusable 330°-001° byd 10 NM; 060°-077° byd 10 NM and 200°-230° byd 10 NM.

COMM/NAV/WEATHER REMARKS: SAWRS avbl 1300-2300Z‡ and upon reg call (740) 773-4788.

#### CINCINNATI

CINCINNATI-BLUE ASH (ISZ) 6 NE UTC-5(-4DT) N39°14.80′ W84°23.34′

CINCINNATI

L-27E IAP

856 B S4 **FUEL** 100LL, JET A1+ OX 3 NOTAM FILE DAY **RWY 06-24**: H3499X75 (ASPH) S-12.5 MIRL 0.7% up SW

**RWY 06:** REIL. VASI(V2L)—GA 4.0° TCH 20'. Trees. **RWY 24:** REIL. VASI(V2L)—GA 4.0° TCH 20'. Trees. Rgt tfc.

AIRPORT REMARKS: Attended Apr-Nov 1200Z‡-dusk, Dec-Mar 1300Z‡-dusk. Deer and wildlife on and invof arpt.

Noise abatement procedures departing Rwy 24; turn rgt heading 270° after tkf, departing Rwy 06 turn left 360° after tkf. Rwy 06 REIL OTS indef. MIRL Rwy 06–24 preset on low ints dusk–dawn; to increase ints and ACTIVATE twy lgts and wind indicator and REIL Rwy 06 and 24—CTAF.

WEATHER DATA SOURCES: AWOS-3 118.475 (513) 794-1520.

COMMUNICATIONS: CTAF/UNICOM 123.0

R APP/DEP CON 121.0 CLNC DEL 124.9

RADIO AIDS TO NAVIGATION: NOTAM FILE CVG.

(L) VORTAC 117.3 CVG Chan 120 N39°00.96′ W84°42.20′ 051° 20.2 NM to fld. 879/04W.

NDB (MHW) 388 ISZ N39°14.93′ W84°23.38′ at fld. NOTAM FILE DAY. NDB OTS indef.

CINCINNATI MUNI ARPT LUNKEN FLD (LUK) 3 SE UTC-5(-4DT)

CINCINNATI H-10G, L-27E IAP, AD

483 B S4 **FUEL** 100LL, JET A OX 1 LRA Class IV, ARFF Index A NOTAM FILE LUK

**RWY 03R-21L**: H6101X150 (ASPH-GRVD) S-60, D-70, ST-88, DT-140 HIRI

RWY 03R: REIL. PAPI(P4R). Tree.

N39°06 20' W84°25 12'

RWY 21L: MALSR. VASI(V4L)—GA 3.0° TCH 38'. Trees.

**RWY 07-25**: H5128X100 (ASPH-GRVD) S-11, D-20, DT-55 MIRL

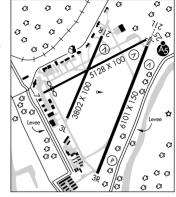
RWY 07: Thid dsplcd 439'. Tree.

RWY 25: VASI(V4L)-GA 3.0° TCH 39'. Trees.

RWY 03L-21R: H3802X100 (ASPH) S-11 MIRL

RWY 03L: Trees. RWY 21R: VASI(V4L)—GA 4.0 TCH 46'. Tree. AIRPORT REMARKS: Attended continuously. Deer and birds on and invof arpt. 48 hr PPR for unscheduled air carrier ops with more than 30 passenger seats call 513–352–6340. Noise abatement procedures in effect call 513–352–6340. Acft maintenance run–ups restricted between 0200–1200Z‡. Rwy 25 and Rwy 21L apch ends are closely aligned. Rotating bcn located 1.7 NM east of the center of Lunken arpt. Verify correct rwy and compass heading prior to departure. Rwys 03L–21R and 07–25 and Twy D not avbl for acft with more than 30 passenger seats. When twr

clsd HIRL Rwy 03R-21L preset on med ints; to increase ints and



ACTIVATE MALSR Rwy 21L—CTAF. MIRL Rwy 03L–21R and Rwy 07–25 unavbl. Ldg fee. Flight Notification Service (ADCUS) available.

WEATHER DATA SOURCES: ASOS (513) 321-6291.

COMMUNICATIONS: CTAF 118.7 ATIS 120.25 UNICOM 122.95

RCO 122.4 (DAYTON RADIO).

R APP/DEP CON 121.0

GND CON/CLNC DEL 121.9

AIRSPACE: CLASS D svc 1200-0400Z± other times CLASS E.

RADIO AIDS TO NAVIGATION: NOTAM FILE CVG.

(L) VORTAC 117.3 CVG Chan 120 N39°00.96′ W84°42.20′ 072° 14.3 NM to fld. 879/04W.

NDB (MHW) 335 LUK N39°09.58′ W84°20.48′ 231° 4.9 NM to fld. NOTAM FILE LUK.

Unmonitored when twr clsd.

MADEIRA NDB (MHW) 379 MDE N39°13.37′ W84°21.32′ 206° 7.7 NM to fld. NOTAM FILE LUK.

Unmonitored when twr clsd.

ILS/DME 110.9 I–LUK Chan 46 Rwy 21L. Class IA. LOC BC unusable byd 10 NM and 15° left and right of course. DME unusable byd 5° left and right of BC. DME unusable byd 25° left and right of course.

COMM/NAV/WEATHER REMARKS: Emerg frequency 121.5 not avbl at twr.

CINCINNATI/NORTHERN KENTUCKY INTL (See COVINGTON, KY)

CINCINNATI WEST (See HARRISON)

CIRCLEVILLE N39°31.39′ W82°58.78′ NOTAM FILE DAY.

NDB (MHW) 366 CYO at Pickaway Co Meml. Unmonitored. SHUTDOWN.

CINCINNATI

CIRCLEVILLE

CLARKS DREAM STRIP (Ø3I) 4 NW UTC-5(-4DT) N39°38.65′ W83°01.09′

CINCINNATI

680 NOTAM FILE DAY

RWY 13-31: 2375X90 (TURF)

RWY 13: Trees. RWY 31: Trees.

AIRPORT REMARKS: Attended dawn-dusk. Parachute jumping. Repairs—part time weekends.

COMMUNICATIONS: CTAF 122.9

PICKAWAY CO MEML (CYO) 5 S UTC-5(-4DT) N39°30.96′ W82°58.93′

684 B S1 FUEL 100LL, JET A ARFF Index Ltd. NOTAM FILE DAY

CINCINNATI I-29A ΙΔΡ

RWY 01-19: H4351X75 (ASPH) S-30, D-40 MIRL 0.5% up N RWY 19: REIL. PAPI (P4R)-GA 3.0° TCH 27'. Road. RWY N1. Trees

AIRPORT REMARKS: Attended Mon-Sat 1300-0100Z‡, Sun 1300-2200Z‡. ACTIVATE MIRL Rwy 01-19, PAPI Rwy 19 and REIL Rwy 19-CTAF.

COMMUNICATIONS: CTAF/UNICOM 122.7

YELLOW BUD RCO 122.1R 112.5T (DAYTON RADIO)

R COLUMBUS APP/DEP CON 132.3

RADIO AIDS TO NAVIGATION: NOTAM FILE DAY.

APPLETON (H) VORTAC 116.7 APE Chan 114 N40°09.06' W82°35.30' 212° 42.2 NM to fld. 1350/6W. **HIWAS** 

YELLOW BUD (T) VOR 112.5 XUB N39°31.61′ W82°58.68′ at fld.

CIRCLEVILLE NDB (MHW) 366 CYO N39°31.39′ W82°58.78′ at fld. Unmonitored. SHUTDOWN.

**CLARK CO** N39°52.42′ W83°46.77′ NOTAM FILE SGH.

CINCINNATI

NDB (MHW) 341 CCJ 238° 3.4 NM to Springfield-Beckley Muni, Unmonitored.

L-27E

CLARKS DREAM STRIP (See CIRCLEVILLE)

CLERMONT CO (See BATAVIA)

#### **CLEVELAND**

BURKE LAKEFRONT (BKL) .9 N UTC-5(-4DT) N41°31.05′ W81°41.00′

DETROIT

583 B S4 FUEL 100LL, JET A OX 1, 2 LRA Class IV. ARFF Index A NOTAM FILE BKL H-10G, L-30G RWY 06L-24R: H6198X150 (ASPH-GRVD) S-93, D-113, ST-144, DT-170 HIRL ΙΔΡ ΔΠ

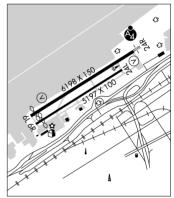
RWY 06L: REIL. VASI(V4L)—GA 3.0° TCH 32'. Thid dsplcd 265'. RWY 24R: MALSF. VASI(V4L)-GA 3.35° TCH 26'. Bldg. Rgt tfc. RWY 06R-24L: H5197X100 (ASPH-GRVD) S-43. D-50.

DT-82 HIRI

RWY 06R: Thid dspied 267'.

RWY 24L: REIL. Antenna. Rgt tfc.

AIRPORT REMARKS: Attended continuously. Rwy 06R-24L CLOSED when twr clsd. Birds and waterfowl on and invof airport. 72' ship crane 1300' SW of Rwy 06R. When twr clsd HIRL Rwy 06L-24R preset; To increase ints radio req on UNICOM. ACTIVATE MALSF Rwy 24R—CTAF. PPR for unscheduled air carrier ops with more than 30 passenger seats ctc 216-781-6411. Rwy 06R-24L not authorized for ops involving air carrier acft with more than 30 passenger seats. Rwy 06L-24R and Rwy 06R-24L apch surfaces have navigable waterways creating possible vessel obstruction areas—check local NOTAMS for current activity; vessel height; etc. Twy G east of twy F CLOSED. Banner towing ops not authorized. Rwy 06L VASI unusable byd 8° left and right of centerline. Ldg fee. Fee schedule based on number of engines



and gross weight. Flight Notification Service (ADCUS) avbl 24 hrs Mon-Fri reg for svc on Sat; Sun and Holidays must be made prior to 2130Z‡ on Fri; 2 hrs advance notice req call 216-522-4781. Private acft and general aviation only.

WEATHER DATA SOURCES: ASOS 125.25 (ops during twr hrs) (216) 241-6904. LLWAS.

COMMUNICATIONS: CTAF 124.3 ATIS 125.25 UNICOM 122.95

R CLEVELAND APP/DEP CON 125.35

LAKEFRONT TOWER 124.3 (Mon 1200Z‡ to Sat 0400Z‡; Sat 1200-0400Z‡, Sun 1300-0500Z‡) **GND CON 121.9** 

AIRSPACE: CLASS D svc Mon 1200Z‡ to Sat 0400Z‡, Sat 1200-0400Z‡, Sun 1300-0500Z‡ other times CLASS G. RADIO AIDS TO NAVIGATION: NOTAM FILE CLE.

CHARDON (H) VOR/DME 112.7 CXR Chan 74 N41°31.02′ W81°09.79′ 275° 23.4 NM to fld. 1310/5W.

**TABEY NDB (LOM)** 248 BF N41°34.15′ W81°34.43′ 245° 5.8 NM to fld. SHUTDOWN.

IIS/DMF 109 75 I-BFT Chan 34(Y) Rwy 24R. Class IE. LOM TABEY NDB. LOM SHUTDOWN.

COMM/NAV/WEATHER REMARKS: Emerg frequency 121.5 not available at twr. Clearance delivery provided by Cleveland apch on 121.9 or call 216-898-2077 when Lakefront twr clsd.

CLEVELAND-HOPKINS INTL (CLE) 9 SW UTC-5(-4DT) N41°24.57′ W81°51.30′ DETROIT 791 B S4 FUEL 100LL, JET A1 + OX 1, 2, 3, 4 A0E Class I, ARFF Index C H-10G I-30G NOTAM FILE CLE ΙΔΡ ΔΠ RWY 06R-24L: H9955X150 (CONC-GRVD) S-100, D-185, ST-175, DT-340 HIRL CL RWY 06R: TDZL. PAPI (P4L)—GA 2.89° TCH 47'. Thid dspicd 1926'. Rwv 10-28: 6017 X 150 Rwy 6L-24R: 9000 X 150 RWY 24L: MALSR. PAPI (P4R)-GA 3.0° TCH 75'. RWY 06L-24R: H9000X150 (CONC-GRVD) S-75, D-200, ST-175, DT-400 HIRL CL RWY 06L: ALSF2, TDZL, PAPI(P4L)—GA 3.0° TCH 55', Trees. RWY 24R: ALSF2. TDZL. PAPI (P2R)-GA 3.0° TCH 55'. RWY 10-28: H6017X150 (ASPH-CONC-GRVD) S-155, D-200. ST-175, DT-400 HIRL 0.5% up E. RWY 10: PAPI(P4L). Road. RWY 28: REIL, MALSR, PAPI(P4R)—GA 3.0° TCH 42', Pole. RUNWAY DECLARED DISTANCE INFORMATION (Ā) RWY 06R: LDA-8029 AIRPORT REMARKS: Attended continuously. Deer and birds, including waterfowl, on and invof arpt. All apchs are over noise sensitive areas. Arpt late night noise abatement procedures are in effect 0400-1100Z<sup>±</sup>. Additional noise abatement procedures are in effect, call arpt manager normal business hrs at 216-265-6090. Twy L2 clsd between Rwy 06R-24L and Twy L: area marked with lgtd barricades and reflectors. The following twys are clsd annually from 15 Oct through 15 Apr to support deicing ops at Cleveland-Hopkins Intl: Twy M, Twy M1 between Twy L and Twy J1, Twy M2 between Twy L and Twy J1, Twy J2 between Twy A and Twy K. Taxilane J south of Twy K restricted to acft with a wingspan of 171' or less, Pad 2 rstd to Group II acft, less than 79' wingspan, NASA Glenn Research Center; NASA ramp PPR call 216-433-2020; Mon-Fri 1300-2230Z‡. Contact NASA ops on freg 122.925 within 50 NM. Ldg Fee. Rwys 06L, 24L and 24R runway visual range touchdown, midfield, rollout avbl. Rwy 28 runway visual range touchdown avbl. Flight Notification Service (ADCUS) available Mon-Fri 1200-0200Z±: Sat-Sun 1400-2200Z±: all request for syc must be made with the U.S. Customs Svc office lctd at gate A-14 call 216-267-3600 during listed hours. NOTE: All CLE SOIA/PRM users refer to Special Notices Section. NOTE: See Special Notices—ILS Prior (Simultaneous Close Parallel) Procedure For Pilots Filing Flight Plans to Cleveland-Hopkins Intl (CLE). Continuous Power Facilities WEATHER DATA SOURCES: ASOS (216) 267-9955/9956. TDWR. COMMUNICATIONS: D-ATIS ARR 127.85 D-ATIS DEP 132.375 UNICOM 122.95 RCO 122.35 122.2 122.1R 122.0 (CLEVELAND RADIO) R APP CON 124.0 (Rwy 06R-24L and Rwy 28) 126.55 and Rwy 28 119.625 (Rwy 06L-24R) R DEP CON 118.15 (057°-236°) 128.25 (237°-056°) 125.85 TOWER 120.9 (Rwy 06R-24L and Rwy 10-28) 124.5 135.225 (Rwy 06L-24R) GND CON 121.7 (Rwy 06R-24L and Rwy 10-28) 133.6 (Rwy 06L-24R) CLNC DEL 125.05 PRE-TAXI CLNC 125.05 RAMP CTL 129.17

AIRSPACE: CLASS B: See VER Terminal Area Chart

RADIO AIDS TO NAVIGATION: NOTAM FILE CLE.

DRYER (H) VOR/DME 113.6 DJB Chan 83 N41°21.48′ W82°09.72′ 082° 14.2 NM to fld. 780/5W. HIWAS.

ILS/DME 109.9 I-HPI Chan 36 Rwy 24L. Class IE.

ILS/DME 111.9 I-CLE Chan 56 Rwy 06R. Class IF

ILS/DME 110.7 I-PXP Chan 44 Rwy 28. Class IE.

ILS/DME 111.55 I-LIZ Chan 52Y Rwy 06L. CLASS IIIE.

ILS/DME 111.55 I-PVY Chan 52Y Rwv 24R. Class IIIE.

COMM/NAV/WEATHER REMARKS: Freq 121.5 not avbl at FSS.

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CUYAHOGA CO (CGF) 10 E UTC-5(-4DT) N41°33.91′ W81°29.18′

879 B S4 FUEL 100LL, JET A, A1+ OX 3 TPA—See Remarks NOTAM FILE CGF RWY 06-24: H5102X100 (ASPH-GRVD) S-43, D-55, DT-100 HIRL

H-10G I-30G IAP, AD

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DETROIT

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RWY 06: REIL. PAPI(P4L)-GA 3.0° TCH 42'. Pole.

RWY 24: MALSR. PAPI(P4L)-GA 3.0°TCH 50'. Trees.

AIRPORT REMARKS: Attended continuously. Rwy 06-24 CLOSED to jet acft with more than 30 passengers. Birds and deer on and invof arpt. Tower visibility SW reduced within 500' AER 06. Rwy 24 PAPI unusable byd 7° right of course. HIRL Rwy 06-24 step one OTS indef. Noise abatement procedures: Avoid overflight of school 3/4 mile SW of arpt; flight training between 0400-1200Z‡ prohibited; all turbojet/turbofan training prohibited; pattern altitude 1879 (1000); 2379 (1500) jets/twins; all acft ctc arpt manager prior to conducting ops between 0400-1200Z‡. Twy A4 not avbl for air carrier ops with more than 30 passenger seats. When twr clsd ACTIVATE HIRL Rwv 06-24, REIL Rwv 06, MALSR Rwv 24-CTAF. PAPI Rwy 06 and Rwy 24 and windsock operate continuously. Ldg fee. Parking fee for over two hrs.

WEATHER DATA SOURCES: LAWRS.

COMMUNICATIONS: CTAF 118.5 UNICOM 122.95

R CLEVELAND APP/DEP CON 125.35 CLEVELAND CLNC DEL 121.85 COUNTY TOWER 118.5 (1200-0400Z‡) GND CON 121.85

AIRSPACE: CLASS D svc 1200-0400Z‡ other times CLASS G.

RADIO AIDS TO NAVIGATION: NOTAM FILE CLE.

CHARDON (H) VOR/DME 112.7 CXR Chan 74 N41°31.02′ W81°09.79′ 286° 14.9 NM to fld. 1310/5W.

HOGAF NDB (LMM) 521 GF N41°34.45′ W81°28.27′ at fld. NOTAM FILE CGF. SHUTDOWN. ILS/DME 111.1 I-CGF Chan 48 Rwy 24. Class IB. LOC unusable byd 10 NM blo 3000'. LOC BC unusable byd 10 NM and unusable byd 15°R of course. (BACK) GS unusable for coupled apchs blo 2020'.

COMM/NAV/WEATHER REMARKS: Emerg frequency 121.5 not available at twr. For IFR clearance when twr clsd cto Cleveland apch control at 216-898-2040.

CLINTON FLD (See WILMINGTON)

COBBS N39°44.58′ W83°01.22′. NOTAM FILE LCK.

NDB (LOM) 253 DD 050° 6.0 NM to Rickenbacker Intl.

CINCINNATI

COLUMBIA (See COLUMBIA STATION)

## **COLUMBIA STATION**

COLUMBIA (4G8) 1 NW UTC-5(-4DT) N41°19.13′ W81°57.61′

DETROIT L-30G

813 FUEL 100LL NOTAM FILE CLE RWY 18R-36L: H3152X40 (ASPH) LIRL (NSTD)

RWY 18R: Thid dsplcd 300'. Trees. RWY 36L: Thid dspicd 209'. Tree.

RWY 18L-36R: 2974X65 (TURF)

RWY 18L: Trees. RWY 36R: Tree.

RWY 02-20: 2580X85 (TURF)

RWY 20: Trees

AIRPORT REMARKS: Attended 1300Z‡-dusk. Rwy 02-20 CLOSED indef. Use hard surface rwy when wet. Rwy 02-20 surface rough. Rwy 18L-36R sfc rough. Rwy 18R-36L pavement poor-weathered. ACTIVATE NSTD LIRL Rwy 18R-36L-CTAF, Rwy 18R-36L NSTD LIRL: no thid lets, Rwy 18R-36L N 300' and S 200' unmarked, Rwy 18R NSTD dsplcd thld markings, no arrowheads. Rwy 36L NSTD dsplcd thld markings, no arrowheads.

COMMUNICATIONS: CTAF/UNICOM 122.8

RADIO AIDS TO NAVIGATION: NOTAM FILE CLE.

DRYER (H) VOR/DME 113.6 DJB Chan 83 N41°21.49′ W82°09.72′ 109° 9.4 NM to fld. 780/5W. HIWAS.

COLUMBIANA CO (See EAST LIVERPOOL)

COLUMBUS N39°59 69' W82°53 13' RCO 122.2 122.3 (DAYTON RADIO)

CINCINNATI H-10G. L-29A

#### COLUMBUS

BOLTON FLD (TZR) 8 SW UTC-5(-4DT) N39°54.07′ W83°08.22′

905 B S4 **FUEL** 100LL, JET A1+ OX 3 TPA—1705(800) NOTAM FILE TZR

RWY 04-22: H5500X100 (ASPH) S-48, D-75, ST-95, DT-150 MIRL

CINCINNATI H-10g, L-29A IAP, AD

RWY 04: MALSR. PAPI(P4L)—GA 3.0° TCH 40'.

RWY 22: REIL. PAPI(P4L)-GA 3.0° TCH 31'. Trees.

AIRPORT REMARKS: Attended 1200–0200Z‡. Balloon and banner activity on and invof arpt. Birds and deer and coyote on and invof arpt. When twr clsd MIRL Rwy 04–22 preset medium ints, to increase ints-ACTIVATE MALSR Rwy 04 and REIL Rwy 22—CTAF.

WEATHER DATA SOURCES: AWOS-3 135.925 (614) 878-1722 COMMUNICATIONS: CTAF 128.1

R COLUMBUS APP/DEP CON 132.3

TOWER 128.1 (1230-0030Z‡) GND CON 121.8

AIRSPACE: CLASS D svc 1230-0030Z‡ other times CLASS G.

RADIO AIDS TO NAVIGATION: NOTAM FILE DAY.

APPLETON (H) VORTAC 116.7 APE Chan 114 N40°09.06'

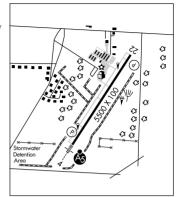
W82°35.30′ 246° 29.4 NM to fld. 1350/6W. HIWAS.

BOUTN NDB (MHW/LOM) 230 BU N39°49.16′ W83°12.29′

 $038^{\circ}$  5.8 NM to fld. Unmonitored when twr clsd. NDB unusable  $355^{\circ}\text{--}010^{\circ}$  byd 15 NM.

IL\$ 111.7 I-BUZ Rwy 04 LOM BOUTN NDB. Unmonitored when twr clsd. GS unmonitored when twr clsd. LOC unusable 355°-010° byd 15 NM.

COMM/NAV/WEATHER REMARKS: Emerg frequency not monitored all times.



**COLUMBUS SOUTHWEST** (Ø4I) 11 SW UTC-5(-4DT) N39°54.67′ W83°11.33′

CINCINNATI

920 B NOTAM FILE DAY

RWY 06-24: 2382X120 (TURF) LIRL

RWY 06: Trees. RWY 24: Bldg.

AIRPORT REMARKS: Attended 1400–2200Z‡. Rwy 06–24 undulating surface; rwy soft when wet; check NOTAMS or call arpt manager at 614–878–4080. Helicopters, acft towing banners and ultralights use rgt tfc. Rwy 06–24 has soft spots. For LIRL Rwy 06–24 and rotating bcn call 614–878–4080. Rwy 06–24 NSTD LIRL; Rwy 06–24 NSTD LIRL STD LIRL; Rwy 06–24 NSTD LIRL; Rwy 06–24 NS

COMMUNICATIONS: CTAF 122.9

DARBY DAN (616) 10 W UTC-5(-4DT) N39°56.52′ W83°12.29′

928 B FUEL 100LL, JET A NOTAM FILE DAY

RWY 09-27: H5892X75 (ASPH) MIRL

RWY 09: REIL. PAPI(P4L). Thid dsplcd 1343'. Tree.

RWY 27: REIL, PAPI(P4L), Thid dspicd 543', Tree, Rgt tfc.

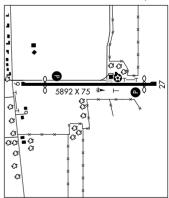
AIRPORT REMARKS: Attended Mon-Fri 1300-2200Z‡. Prior arrangement for Sat-Sun call 614-853-2400. Rwy 09 PAPI OTS indef. Rwy 27 PAPI OTS indef. ACTIVATE MIRL Rwy 09-27; rotating bcn; REIL Rwy 09 and Rwy 27; PAPI Rwy 09 and Rwy 27—CTAF. Rwy 09 and Rwy 27 REILS OTS indef. Ldg fee.

COMMUNICATIONS: CTAF/UNICOM 122.7

RADIO AIDS TO NAVIGATION: NOTAM FILE DAY.

APPLETON (H) VORTAC 116.7 APE Chan 114 N40°09.06′ W82°35.30′ 252° 31.1 NM to fld. 1350/6W. HIWAS.

CINCINNATI H-10G, L-29A



DEPARTMENT OF TRANSPORTATION HELIPORT (2A7) O W UTC-5(-4DT)

CINCINNATI

N39°57.59′ W83°02.65′

715 NOTAM FILE DAY

HELIPAD H1: H40X40 (ASPH)

**HELIPORT REMARKS:** Attended continuously.

**COMMUNICATIONS: CTAF 122.9** 

**OHIO STATE UNIVERSITY** (OSU) 10 NW UTC-5(-4DT) N40°04.79′ W83°04.38′

905 B S4 **FUEL** 100LL, JET A1 + OX 1, 2 Class IV, ARFF Index A NOTAM FILE OSU H-10G I-29A RWY 09R-27L: H5004X100 (ASPH-GRVD) S-45, D-60 HIRL

RWY 09R: MALSR. VASI(V4L)-GA 3.0° TCH 31'. Pole.

RWY 27L: REIL. VASI(V4L)—GA 3.0° TCH 40'. Tree.

RWY 05-23: H3555X100 (ASPH) S-21, D-32 MIRL 0.3% up SW RWY 05: Trees RWY 23. Trees

RWY 14-32: H3437X100 (ASPH) S-32.5, D-42, DT-61 MIRL

RWY 14: Trees. RWY 32: Trees

RWY 09L-27R: H2994X100 (ASPH) S-25.2 MIRL 0.4% up W RWY 09L: VASI(V2L)-GA 3.0° TCH 29'. Silo.

RWY 27R: VASI(V2L)-GA 3.0° TCH 42'. Trees.

#### LAND AND HOLD SHORT OPERATIONS

LANDING	HOLD SHORT POINT	DIST AVBL
RWY 05	09L-27R	3350
RWY 09L	05-23	2550
RWY 09R	14-32	3300
RWY 14	09R-27L	2750
RWY 23	09R-27L	2500
RWY 27L	05-23	3300

#### RUNWAY DECLARED DISTANCE INFORMATION

RWY 27R-

TORA-3555 TODA-3555 ASDA-3555 LDA-3555 TORA-2994 TODA-2994 ASDA-2994 LDA-2994 RWY 09R: TORA-5004 TODA-5004 ASDA-5004 LDA-5004 RWY 23. TORA-3555 TODA-3555 ASDA-3555 LDA-3555 RWY 271 · TORA-5004 TODA-5004 ASDA-5004 LDA-5004

AIRPORT REMARKS: Attended 1130-0400Z‡, Birds and deer on and invof

TORA-2994 TODA-2994 ASDA-2994 LDA-2994

arpt. Closed to scheduled air carrier ops with greater than 9

passenger seats and unscheduled air carrier ops greater than 30

passenger seats. 90-day PPR, call arpt manager 614-292-5460. Noise sensitive area within 4 miles to the N and NE. Noise abatement restrictions: No touch and go ldgs or repeated tkf and ldgs 0400-1200Z‡ daily. All movement area N of Rwy 09R-27L are not avbl for air carrier ops with more than 30 passenger seats. Snow removal operating procedures: when twr clsd announce arrival on freq 118.8, ACTIVATE MALSR Rwy 09R—CTAF. When twr clsd HIRL Rwy 09R-27L, MIRL Rwy 14-32 preset med ints and MIRL Rwy 09L-27R and Rwy 05-23 not avbl.

WEATHER DATA SOURCES: ASOS (614) 451-2465. LAWRS.

COMMUNICATIONS: CTAF 118.8 ATIS 121.35 UNICOM 122.95

(R) COLUMBUS APP/DEP CON 120.2

**STATE TOWER** 118.8 (1200-0400Z‡) **GND CON** 121.7 **CINC DFI** 121 7

AIRSPACE: CLASS D svc 1200-0400Z‡ other times CLASS G.

RADIO AIDS TO NAVIGATION: NOTAM FILE DAY.

APPLETON (H) VORTAC 116.7 APE Chan 114 N40°09.06′ W82°35.30′ 265° 22.7 NM to fld. 1350/6W. 2AWIH

DON SCOTT NDB (MHW) 348 DKG N40°04.82' W83°04.73' at fld. NOTAM FILE OSU. Unmonitored when twr clsd SHUTDOWN

FULER NDB (MHW/LOM) 515 OS N40°04.42′ W83°11.89′ 091° 5.8 NM to fld.

ILS 108.5 I-OSU Rwy 09R LOM FULER NDB. Unmonitored when twr clsd.

COMM/NAV/WEATHER REMARKS: Emerg frequency 121.5 not avbl at twr.

. . . . . HELIPAD H1: H40X40 (ASPH)

HELIPORT REMARKS: Helipad relocated N side of airfield, near Air Guard ramp. All app/dep routes helicopters ops are conducted in an area  $130^{\circ}$ – $110^{\circ}$  clockwise using the touchdown pad as the center of a compass rose.

Rwy 9L-27R: 2994 X 100 Rwy 5-23: 3555 X 100 C 3 છે છે G. 40 X 40 • 03 03 • ેં<sub>લ</sub> લેંલ - 63 €3 03 Pasidential Area

DETROIT

ΙΔΡ ΔΠ

PORT COLUMBUS INTL (CMH) 6 E UTC-5(-4DT) N39°59.88′ W82°53.51′

CINCINNATI

815 B S4 FUEL 100, JET A1 + OX 3, 4 LRA Class I, ARFF Index C NOTAM FILE CMH H-10G, L-29A RWY 10R-28L: H10125X150 (ASPH-GRVD) S-100, D-200, ST-175, DT-325 HIRL IAP, AD

RWY 10R: MALSR. PAPI(P4R)—GA 3.0° TCH 72'

RWY 28L: MALSR.

RWY 10L-28R: H8000X150 (ASPH-GRVD) S-100, D-160, ST-175, DT-275 HIRI

RWY 10L: MALSR. PAPI(P4L)-GA 3.0° TCH 51'

RWY 28R: MALSR. PAPI(P4R)-GA 3.0° TCH 50'.

#### RUNWAY DECLARED DISTANCE INFORMATION

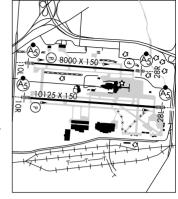
RWY 10L: TORA-8000 TODA-8000 ASDA-8000 LDA-8000 RWY 10R: TORA-10125 TODA-10125 ASDA-10125 LDA-10125

RWY 28L: TORA-10125 TODA-10125 ASDA-10125 LDA-10125

RWY 28R: TORA-8000 TODA-8000 ASDA-8000 LDA-8000

AIRPORT REMARKS: Attended continuously. Birds invof arpt. PAEW

adjacent all rwys and twys. Model acft tfc within a 1 NM radius of a point 8 NM on a 010° bearing from the arpt; surface–5000 ft AGL; SR–SS daily. Be alert: Rwy 10L/28R restrictions on Stage I and II turbojet acft 0300–1300Z‡ and on Stage III turbojet acft 0300–1200Z‡. Practice apchs for high noise level type acft including non-Stage III military jet acft shall not be approved unless Rwy 10R/28L is in use and the apch terminates in a full



stop taxi-back ops. All surfaces around terminal; N of Twy 'C' and S of Twy 'E' are non-movement areas. Twy B3 S of Twy B restricted to acft with wingspan less than 79'. C-3 pavement (north of Twy C) is 35' wide; restricted to acft 50,000 lbs or less with wing span less than 79'. Twy L1 restricted to acft with wingspan less than 118'. Twy L2 restricted to acft with wingspan less than 120'. Twy B between Twys B4 and B5 restricted to acft with wingspan less than 120'. Twy B between Twys B4 and B5 restricted to acft with wingspan less than 126'. Twys F and G, S of Twy B, restricted to acft weighing 45,000 lbs or less. Noise barrier located at SE side of airfield restricted to acft with wingspan less than 79'. Ldg fee. Twy F lgts S of Twy 'G' OTS indef. To req ldg rights ctc US Customs between 1230–03002‡ Mon-Fri at 614–497–1865. Flight Notification Service (ADCUS) avbl.

WEATHER DATA SOURCES: ASOS (614) 338-0561. LLWAS. TDWR.

COMMUNICATIONS: D-ATIS 124.6 UNICOM 122.95 COLUMBUS RCO 122.2 122.3 (DAYTON RADIO)

® COLUMBUS APP/DEP CON 119.15 132.3 (100°-279°) 125.95 (280°-099°) 118.2 119.65

COLUMBUS TOWER 132.7 GND CON 121.9 CLNC DEL 126.3

AIRSPACE: CLASS C svc continuous ctc APP CON

RADIO AIDS TO NAVIGATION: NOTAM FILE DAY.

APPLETON (H) VORTAC 116.7 APE Chan 114 N40°09.06′ W82°35.30′ 243° 16.7 NM to fld. 1350/6W. HIWAS.

GRENS NDB (MHW) 272 CHC N40°00.61′ W83°01.74′ 102° 6.4 NM to fld. NOTAM FILE CMH.

SUMIE NDB (HW/LOM) 391 CM N39°59.17′ W82°45.27′ 281° 6.4 NM to fld. Unmonitored.

ILS/DME 109.1I-CBPChan 28Rwy 10L.Class IA.LOM GRENS NDB. DME also serves Rwy 28R.ILS/DME 108.7I-CMHChan 24Rwy 28L.LOM SUMIE NDB. LOM unmonitored. DME also serves Rwy

10R.

ILS/DME 108.7 I-AQI Chan 24 Rwy 10R. DME also serves Rwy 28L.

ILS/DME 109.1 I-ONB Chan 28 Rwy 28R. DME also serves Rwy 10L. Glide slope unusable for autopilot

coupled apchs blo 2023'.

COMM/NAV/WEATHER REMARKS: ILS/DME Rwy 10L outer marker OTS indef.

RICKENBACKER INTL (LCK)(KLCK) CIV/MIL/ANG/ARNG 10 S UTC-5(-4DT)

N39°48.83′ W82°55.67′

CINCINNATI H-10g, L-29a IAP. DIAP. AD

744 B S4 FUEL 100LL, JET A TPA – See Remarks LRA Class I, ARFF Index A

RWY 05R-23L: H12102X200 (ASPH-CONC-GRVD) S-75, D-120, ST-175, DT-380, DDT-800 HIRL CL

RWY 05R: ALSF2. TDZL. PAPI(P4L)—GA 3.0° TCH 66'.

RWY 23L: MALSR. PAPI(P4L)—GA 3.0° TCH 74'.

RWY 05L-23R: H11937X150 (ASPH-GRVD) S-75, D-120, ST-175, DT-240. DDT-700 HIRL

DT-240, DDT-700 HIRL **RWY 05L:** MALSR. PAPI(P4L)—GA 3.0° TCH 75'. Thid dspicd 919'.

RWY 23R: REIL. PAPI(P4L)—GA 3.0° TCH 75′. Thid dsplcd 1003′. MILITARY SERVICE: L6T Boundary Igt avbl. JASU 2(A/M–32A) (MA–1A) 3(AM32–95) FUEL J8(Military) (NC–100LL). A, A+ (Lane Aviation, C614–237–3747 extension 218, avbl Mon–Fri 24 hours, Sat 0500–0200Z‡, Sun including holidays 0900–0500Z‡, 4 hour prior

0500–0200Z‡, Sun including holidays 0900–0500Z‡, 4 hour princtice required but no PPR C237–3747 x 318, after hour fee \$130. FLUID SP PRESAIR LHOX OIL 0–128 TRAN ALERT Ltd svc avbl but no PPR required. No ANG tran svc off ANG ramp. AIRPORT REMARKS: Attended continuously. General aviation svcs

attended continuously call C614-237-3747 ext 318, or 614-409-4900. Birds on and invof arpt. Twy M clsd indef. Twy J



clsd to group V acft. Noise abatement procedures in effect from 0400–1200Z‡, dep Rwy 23L and 23R winds 10 knots or less; arrivals Rwy 05L and 05R winds 10 knots or less; arpt ops C614–492–2436. PPR for unscheduled Air Carrier ops with more than 30 passenger seats. Rwy 05R–23L has 1000' stopway on both ends; not avbl for ASDA. Rwy 05R–23L PAPI and ILS radar position indicator not coincidental. TPA for Igt acft weighing 12,500 lbs or less 1400(656), TPA for acft greater than 12,500 lbs 1900(1156), TPA for overhead tfc 2400(1656). Rwy 05R ALSF II unmonitored indef. Rwy 05R–23L PAPI and ILS Runway Point of Intercept not coincidental. To req Idg rights ctc US Customs between 1230–0300Z‡ Mon–Fri at 614–497–1865.

MILITARY REMARKS: See FLIP AP/1 Supplementary Arpt Remarks. RSTD AMC acft opr restricted during Bird Watch Conditions Moderate (tkf and ldg permission only when departure/arrival routes avoid identification bird activity, no local IFR/VFR tfc pattern) and Severe (tkf and ldg prohibited without OG/CC approval) ctc Comd Post for current Bird Watch Conditions code. All military acft must RON on 121 ARW or Detachment–21 ramp when space is avbl. All fixed wing military acft requiring parking and/or svc on 121 ARW ramp must have PPR number 48 hr in advance from Base OPS DSN 696–4595, C614–492–4595. Base OPS hr vary. Clsd holidays. CAUTION Bird and deer hazard. CSTMS/AG/IMG Avbl only with prior coordination. ANG 121 ARW KC–135–R Comd Post DSN 696–4468. Limited tran svc avbl, weekdays 1200–2000Z‡ except holidays. Limited tran fuel/parking, tran aircrew must assist/perform refuel opr. Fuel avbl on ANG ramp on prior request only. Acft support not coordinated by PPR 48 hr prior with 121 ARW may not be avbl. ARNG Opr weekdays 1200–2100Z‡ except holidays. No tran svc after 1900Z‡, DSN 346–6411, C614–336–6411. Ctc C–26 OPS prior to entering C–26 ramp park area, 139.3 DSN 346–6473. C614–336–6473.

WEATHER DATA SOURCES: AWOS-3 132.750 (C614) 492-2441.

COMMUNICATIONS: UNICOM 122.95

R COLUMBUS APP/DEP CON 119.15 279.6

RICK TOWER 120.05 348.4 GND CON 121.85 257.8

ANG COMD POST 238.8 (RICK CON) ARNG OPS 142.6 228.8 36.7 ARNG C-26 OPS 139.3 121 ARW OPS 238.8 (BRUTUS OPS)

RADIO AIDS TO NAVIGATION: NOTAM FILE DAY.

APPLETON (H) VORTAC 116.7 APE Chan 114 N40°09.06′ W82°35.30′ 224° 25.6 NM to fld. 1350/6W. HIWAS.

(T) TACAN Chan 69 LCK (134.2) N39°48.49′ W82°55.73′ at fld. 732/5W. NOTAM FILE LCK. No NOTAM MP Wed 1300–1500Z‡.

TACAN azimuth unusable:

290°-300° blo 4,000′

130°-170° byd 18 NM blo 5,000′

TACAN azimuth and DME unusable:

075°-130° byd 12 NM blo 5,000′

075°-170° blo 3,000′

COBBS NDB (LOM) 253 DD N39°44.58′ W83°01.22′ 050° 6.0 NM to fld.

PICKL NDB (LOM) 376 LC N39°52.86′ W82°50.17′ 231° 5.9 NM to fld.

ILS/DME 110.1 I-DDV Chan 38 Rwy 05R. Class IIE. LOM COBBS NDB. No NOTAM MP Mon, Tue 1300-1700Z‡.

ILS 110.1 I-LCK Rwy 23L. Class IE. LOM PICKL NDB. MM OTS indef. No NOTAM MP Mon, Tue 1300-1700Z±.

ILS/DME 110.55 I-FQS Chan 42Y Rwy 05L. Class IE.

COMM/NAV/WEATHER REMARKS: Ctc ground control for clearance prior to push back onto Twy A from cargo ramp 2.

CONCORD AIRPARK (See PAINESVILLE)

COSHOCTON

RICHARD DOWNING (I4Ø) 3 N UTC-5(-4DT) N40°18.55′ W81°51.20′

DETROIT L-29B IAP

979 B **FUEL** 100LL, JET A NOTAM FILE CLE **RWY 04–22**: H4099X75 (ASPH) S–30. D–35 MIRL

RWY 04: PAPI(P2L)—GA 3.5°. Trees.

RWY 22: REIL. PAPI(P2L).

AIRPORT REMARKS: Attended May-Oct 1300-0100Z‡, Nov-Apr 1300-2200Z‡. Deer on and invof arpt. Rwy 22 REIL

OTS indef. PAPI Rwys 04 and 22 opr continuously. ACTIVATE MIRL Rwy 04–22—122.9.

WEATHER DATA SOURCES: AWOS-3 118.875 (740) 622-1267.

COMMUNICATIONS: CTAF/UNICOM 123.0

R INDIANAPOLIS CENTER APP/DEP CON 124.45

RADIO AIDS TO NAVIGATION: NOTAM FILE ZZV.

ZANESVILLE (L) VOR/DME 111.4 ZZV Chan 51 N39°56.45′ W81°53.56′ 011° 22.2 NM to fld. 900/6W.

COURT HOUSE N39°36.05′ W83°23.50′ NOTAM FILE DAY.

CINCINNATI

NDB (MHW) 414 CSS 222° 2.3 NM to Fayette Co. NDB unusable 115°-165° byd 20 NM.

L-29A

## COVINGTON, KY

CINCINNATI/NORTHERN KENTUCKY INTL (CVG) 8 SW UTC-5(-4DT) N39°02.93′ W84°40.07′ CINCINNATI 896 B S4 FUEL 100LL, Jet A Lra Arff Index D Notam file CVG H-10G, L-26G, 27E RWY 09-27: H12000X150 (ASPH-CONC-GRVD) S-75, D-210, ST-175, DT-400, DDT-850 IAP HIRL CL

RWY 09: MALSR. PAPI(P4L)—GA 3.0° TCH 76'. 0.3% down.

RWY 27: MALSR(NSTD). VASI(V4L)-GA 3.0° TCH 60'.

RWY 18C-36C: H11000X150 (ASPH-CONC-GRVD) S-75, D-210, ST-175, DT-400, DDT-850 HIRL CI

RWY 18C: SSALR. TDZL. VASI(V4R)—GA 3.0° TCH 52'.

RWY 36C: ALSF2. TDZL. PAPI(P4L). 0.6% up

**RWY 18L-36R**: H10000X150 (CONC-GRVD) S-75, D-210, ST-175,

DT-400, DDT-850 HIRL CL RWY 18L: MALSR. TDZL. PAPI(P4R)

RWY 36R: ALSF2, TDZL, PAPI(P4R).

RWY 18R-36L: H8000X150 (CONC-GRVD) S-75, D-210, DT-400,

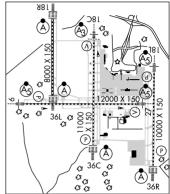
DDT-850 HIRL CL
RWY 18R: ALSF2, TDZL, RWY 36L: ALSF2, TDZL, Tree.

#### RUNWAY DECLARED DISTANCE INFORMATION:

**RWY 09**: TORA-12000 TODA-12000 ASDA-11880 LDA-11880 **RWY 27**: TORA-12000 TODA-12000 ASDA-12000 LDA-12000

AIRPORT REMARKS: Attended continuously. Rwy 09-27 W 4200' conc; E

 $750^{\prime}$  conc; remainder asph overlay. For all rwys gross weight strength for 777 acft is 595,000 lbs. For all rwys gross weight strength for MD–11 acft is 605,000 lbs. Rwys 09–27 and 18C–36C gross weight strength for DC–10 and L–1011 acft is 510,000 lbs. Noise sensitive areas N and S of arpt. Rwy 36R touchdown, midfield and rollout rwy visual range avbl. Rwy



assignments between 0300–1200Z‡ will be predicated on noise abatement considerations. Successive or simultaneous departures from Rwys 18L/C are approved with course divergence beginning no further than 2 miles from EOR due to noise abatement restrictions. Successive or simultaneous departures from Rwy 36L and Rwy 36R are approved with course divergence beginning no further than 2 miles from EOR due to noise abatement restrictions. Rwy 18R touchdown, midfield and rollout RVR avbl. Rwy 36L touchdown, midfield and rollout RVR avbl. Flight Notification Service (ADCUS) avbl. NOTE: See Special Notices—Continuous Power Facilities.

WEATHER DATA SOURCES: ASOS (859) 767-8210. TDWR.

COMMUNICATIONS: D-ATIS ARR 134.375 D-ATIS DEP 135.3 UNICOM 122.95

RCO 122.1R 117.3T (LOUISVILLE RADIO)

R APP CON 123.875 (270°-089°) 119.7 (090°-269°)

TOWER 118.975 (Rwy 18L-36R) 118.3 (Rwy 18C-36C Rwy 09-27) 133.325 (Rwy 18R-36L) GND CON 121.7 (West) 121.3 (East) CLNC DEL 127.175

R DEP CON 128.7 (220°-040°) 126.65 (041°-219°)

AIRSPACE: CLASS B svc continuous ctc APP CON

RADIO AIDS TO NAVIGATION: NOTAM FILE CVG.

(L) VORTAC 117.3 CVG Chan 120 N39°00.96′ W84°42.20′ 044° 2.6 NM to fld. 879/4W.

IL\$ 108.7 I-JDP Rwy 27. Class IA. LOC unusable byd 20° right of course.

ILS/DME 110.35 I-EEI Chan 40(Y) Rwy 36R. Class IIIE.

ILS/DME 110.75 I-CJN Chan 44(Y) Rwy 18R. Class IIIE.

LOC unusable byd 25° left of course.

CUBLA N39°21.21′ W83°52.55′. NOTAM FILE ILN.

CINCINNATI

NDB (MHW/LOM) 299 HW 045° 5.9 NM to Airborne Airpark.

L-27E

CUYAHOGA CO (See CLEVELAND)

DAHIO TROTWOOD (See Dayton)

DARKE CO (See VERSAILLES)

234 UHIU NAYTON N40°00.99′ W84°23.81′ NOTAM FILE DAY. DETROIT (L) VOR/DME 114.5 DQN Chan 92 131° 10.7 NM to H-10G, L-27E James M. Cox Dayton Intl. 990/1W. HIWAS. DME unusable byd 35 NM blo 2900'. RCO 122.1R 114.5T 122.2 122.55 (DAYTON RADIO) DAYTON **DAHIO TROTWOOD** (I44) 7 W UTC-5(-4DT) N39°45.95′ W84°20.60′ CINCINNATI 925 B S5 FUEL 100LL NOTAM FILE DAY RWY 04-22: H2900X52 (ASPH) S-5 RWY NA. Trees RWY 22. Trees AIRPORT REMARKS: Attended irregularly, Ultralights on and invof arpt, PAEW N end ramp and N end Twy A Mon-Fri, Arpt hon OTS indef WEATHER DATA SOURCES: HIWAS 114 5 DON COMMUNICATIONS: CTAF/UNICOM 122 8 DAYTON APP/DEP CON 126.5 (091°-180°) ------DAYTON TRANSPORTATION CENTER HELIPORT (5D7) O N UTC-5(-4DT) CINCINNATI N39°45 50' W84°11 50' 800 B NOTAM FILE DAY HELIPAD H1: H40X40 (CONC) HELIPORT REMARKS: Unattended, 40' x 40' conc pad within 80' x 60' ldg/tkf area, Maximum ldg weight 4500 lbs. For perimeter Igts and rotating bcn call superintendent of acft ops at 937-454-8299. 24 hrs advance notice for use reg. Helipad H1 perimeter lgts. WEATHER DATA SOURCES: HIWAS 114.5 DON. **COMMUNICATIONS: CTAF 122.9 DAYTON-WRIGHT BROTHERS** (MGY) 10 S UTC-5(-4DT) N39°35.34′ W84°13.49′ 957 B S4 FUEL 100LL. JET A OX 1 TPA—1957(1000) NOTAM FILE MGY H-10G, L-27E RWY 02-20: H5000X100 (ASPH-GRVD) S-50, D-60 MIRL 0.4% up N RWY 20: MALS. VASI(V4L)—GA 3.0° TCH 41'. Thid dspicd 590'. Road. RWY 02: PAPI(P2L)—GA 3.0°. Trees. AIRPORT REMARKS: Attended 1300-0100Z‡. Birds and deer on and invof arpt. ACTIVATE MIRL RWY 02-20; MALS Rwy 20-CTAF, PAPI Rwy 02 and VASI Rwy 20 ops 24 hrs. WEATHER DATA SOURCES: ASOS 118.375 (937) 885-2171. HIWAS 114.5 DON. COMMUNICATIONS: CTAF/UNICOM 122 8 R APP CON 126.5 (091°-180°) 118.85 127.225 R DEP CON 126.5 (091°-180°) CLNC DEL 119.4 (937) 454-7282 RADIO AIDS TO NAVIGATIONS: NOTAM FILE FFO. MIDWEST (T) VORW/DME 112.9 MXQ Chan 76 N39°25.78′ W83°48.07′ 300° 21.9 NM to fld 1050/4W. ONIDA NDB (LOM) 223 MW N39°34.69′ W84°19.42′ 086°4.6 NM to fld. NOTAM FILE MGY. Unmonitored. ILS/DME 109.5 I-MGY Chan 32 Rwy 20 LOC only. LOC unusable inside 1.2 NM. \_\_\_\_\_\_\_ GREENE CO-LEWIS A. JACKSON RGNL (I19) 10 E UTC-5(-4DT) N39°41.46′ W83°59.52′ 949 B S4 FUEL 100LL, JET A+ NOTAM FILE DAY L-27E RWY 07-25: H4500X75 (ASPH) S-30 LIRL 0.7% up E IAP RWY 07: REIL. PAPI(P2L)—GA 4.0° TCH 34'. Trees. RWY 25: REIL, PAPI(P2L), Trees. AIRPORT REMARKS: Attended Apr-Oct 1300-0100Z‡; Nov-Mar 1300-2200Z‡. Unattended Christmas, New Years and Thanksgiving Days. Fuel available 24 hrs with credit card. Deer on and invof arpt. PAEW adjacent Rwy 07 SR-SS. REIL Rwy 25 OTS indef. ACTIVATE MIRL Rwy 07-25 PAPI Rwy 25 and REIL Rwy 07 and Rwy 25—CTAF. WEATHER DATA SOURCES: AWOS-3 118.525 (937) 372-4668. HIWAS 114.5 DON. COMMUNICATIONS: CTAF/UNICOM 122 7 R DAYTON APP/DEP CON 126.5 (091°-180°) GCO 121.725 (DAYTON CLNC) RADIO AIDS TO NAVIGATION: NOTAM FILE ILN.

MIDWEST (T) VORW/DME 112.9 MXO Chan 76 N39°25.78′ W83°48.07′ 335° 18 NM to fld. 1050/4W.

Unmonitored when twr clsd.

Rwy 06R-24L: 7001 X 150

\$ (A)

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JAMES M COX DAYTON INTL (DAY) 9 N UTC-5(-4DT) N39°54.14′ W84°13.16′

ΙΔΡ ΔΠ

1009 B S4 FUEL 100, JET A OX 1 LRA ARFF Index—See Remarks NOTAM FILE DAY H-106, L-27E RWY 06L-24R: H10900X150 (ASPH-CONC-GRVD) S-100, D-210, ST-175, DT-583, DDT-870 HIRL CL

RWY 06L: ALSF2. TDZL.

RWY 24R: MALSR. VASI(V4L)-GA 3.0° TCH 54'. Tree.

RWY 18-36: H8502X150 (ASPH-CONC-GRVD) S-100, D-210, ST-175, DT-583, DDT-870 HIRL

RWY 18: MALSR. Trees.

RWY 36: REIL, VASI(V4L)-GA 3.0° TCH 46', Trees.

RWY 06R-24L: H7001X150 (ASPH-CONC-GRVD) S-100, D-210, ST-175, DT-583, DDT-870 HIRL

RWY 06R: REIL, PAPI(P4L)-GA 3.0°, TCH 52', Tree.

RWY 24L: MALSR. PAPI(P4L)-GA 3.0°. TCH 51'. Pole.

AIRPORT REMARKS: Attended continuously. Deer, coyotes, birds and waterfowl on and invof arpt. First 1400' Rwy 24R concrete. First 1500' of Rwy 18 concrete. Rwy 36 VASI OTS indef. Class I, ARFF Index C. ARFF index E avbl with 24 hrs notice; call arpt operations 937-454-8299. Twy H clsd between Twy D and Rwy 18-36 indef. Twy C, Twy K, Twy H and Twy J not avbl for air carrier ops. Terminal ramp is a non-movement area. Runups prohibited in Rwv 24L holding area. Flight Notification Service (ADCUS) available.

WEATHER DATA SOURCES: ASOS (937) 454-7845. HIWAS 114.5 DON. TDWR

COMMUNICATIONS: ATIS 125.8 UNICOM 122.95

DAYTON RCO 122.1R 114.5T 122.2 122.55 (DAYTON RADIO)

R DAYTON APP/DEP CON 118.85 126.45 (091°-180°) 134.45 (181°-359°) 118.425 (360°-090°) 118.0 126.5 DAYTON TOWER 119.9 GND CON 121.9 CLNC DEL 121.75

AIRSPACE: CLASS C svc continuous ctc APP CON

RADIO AIDS TO NAVIGATION: NOTAM FILE DAY.

DAYTON (L) VOR/DME 114.5 DQN Chan 92 N40°00.99' W84°23.81' 131° 10.7 NM to fld. 990/1W. HIWAS.

BRUNY NDB (LOM) 315 AT N39°50.82′ W84°20.09′ 062° 6.3 NM to fld.

IIS 108 3 I\_DAY Rwy 18.

I-ATD Rwv 06L. LOM BRUNY NDB. IIS 108 9

IL\$ 110.3 I-EGK Rwy 24L.

ILS 111.9 I-VUQ Rwy 24R. Class IE.

ASR

MORAINE AIR PARK (173) 4 SW UTC-5(-4DT) N39°40.95′ W84°14.58′

CINCINNATI

720 FUEL 100LL NOTAM FILE DAY

RWY 08-26: H3500X65 (ASPH) MIRL

RWY 08: Thid dspled 558', Dike.

RWY 26: Thid dsplcd 136'. Dike.

AIRPORT REMARKS: Attended dalgt hrs. PAEW adjacent twvs.

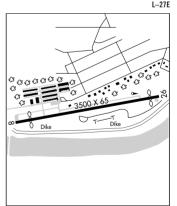
WEATHER DATA SOURCES: HIWAS 114.5 DON.

COMMUNICATIONS: CTAF/UNICOM 122.7

DAYTON APP/DEP CON 126.5 (091°-180°)

RADIO AIDS TO NAVIGATION: NOTAM FILE FFO.

SPRINGFIELD (T) VORW/DME 113.2 SGH Chan 79 N39°50.19' W83°50.70' 248° 20.6 NM to fld. 1047/4W.



DARBY DAN (See COLUMBUS)

DEFIANCE MEM (DFI) 4 NW UTC-5(-4DT) N41°20.25′ W84°25.73′

DETROIT 707 B S4 FUEL 100LL, JET A OX 4 NOTAM FILE DFI RWY 12-30: H4197X72 (ASPH) MIRL

RWY 30: REIL. VASI(NSTD). Trees. RWY 12: REIL. PAPI(P4L). Trees.

AIRPORT REMARKS: Attended Mon-Fri 1300-2300Z‡, Sat 1300-2200Z‡, Sun 1700-2200Z‡. Rwy 30 single box VASI left side of rwy. Rwy 12-30 parallel twy rstd to 5,000 lbs max gross weight. MIRL Rwy 12-30 preset low ints; to increase ints and ACTIVATE REILS Rwy 02 and Rwy 30-CTAF.

WEATHER DATA SOURCES: ASOS 121.425 (419) 658-2301.

COMMUNICATIONS: CTAF/UNICOM 122.7

(R) TOLEDO APP/DEP CON 134.35

RADIO AIDS TO NAVIGATION: NOTAM FILE CLE.

WATERVILLE (L) VOR/DME 113.1 VWV Chan 78 N41°27.09′ W83°38.32′ 261° 36.3 NM to fld. 660/2W. NDB (MHW) 246 DFI N41°20.07′ W84°25.61′ at fld. NOTAM FILE DFI.

**DELAWARE MUNI** (DLZ) 3 SW UTC-5(-4DT) N40°16.78′ W83°06.89′

945 B S4 FUEL 100LL JET A NOTAM FILE DAY

DETROIT H-10G, L-29A

1-281 ΙΔΡ

RWY 10-28: H5000X100 (ASPH) S-30, D-55 MIRL

RWY 28: REIL. PAPI(P4L)-GA 3.0°. Trees.

AIRPORT REMARKS: Attended 1300-22002‡. Deer on and invof arpt. Ultralight tfc remain S of Rwy 10-28 at 400' AGL. Rwy 28 PAPI OTS indef. REIL Rwy 10 OTS indef. ACTIVATE MIRL Rwy 10-28-CTAF.

WEATHER DATA SOURCES: AWOS-3 119.025 (740) 362-4416.

COMMUNICATIONS: CTAF/UNICOM 122.7

R COLUMBUS APP/DEP CON 120.2

RADIO AIDS TO NAVIGATION: NOTAM FILE DAY.

RWY 10: REIL. PAPI(P4L)-GA 3.0°.

APPLETON (H) VORTAC 116.7 APE Chan 114 N40°09.06' W82°35.30' 294° 25.4 NM to fld. 1350/6W. **HIWAS** 

NDB (MHW) 215 DLZ N40°16.61′ W83°06.22′ at fld

#### DEPARTMENT OF TRANSPORTATION HELIPORT (See COLUMBUS)

DESHLER MUNI LANDING STRIP (6D7) 2 NE UTC-5(-4DT) N41°12.95′ W83°52.46′ DETROIT

RWY 27: Trees.

706 NOTAM FILE CLE

RWY 09-27: 2480X70 (TURF)

RWY 09: Thid dspicd 740'. Trees. RWY 05-23: 1725X60 (TURF)

RWY 05: Thid dspicd 410'. Bldg. RWY 23: Thid dspicd 90'. Fence.

AIRPORT REMARKS: Unattended. Birds and deer on and invof arpt. Rwy 05-23 dsplcd thids marked with yellow cones. Rwy 09 dsplcd thid marked with cones.

**COMMUNICATIONS: CTAF 122.9** 

**DON SCOTT** N40°04.82′ W83°04.73′ NOTAM FILE OSU.

DETROIT L-29A

NDB (MHW) 348 DKG at Ohio State University. Unmonitored when twr clsd. SHUTDOWN.

DETROIT

DRYER N41°21.48′ W82°09.72′ NOTAM FILE CLE.

(H) VOR/DME 113.6 DJB Chan 83 226° 1.1 NM to Lorain Co Rgnl. 780/5W. HIWAS. VOR unusable 225°-245° byd 20 NM blo 3500'.

H-10G, L-30G

RCO 122.1R 113.6T (CLEVELAND RADIO)

# EAST LIVERPOOL

**COLUMBIANA CO** (Ø2G) 4 NW UTC-5(-4DT) N40°40.40′ W80°38.49′

1160 B S3 FUEL 100LL NOTAM FILE CLE

RWY 07-25: H3503X75 (ASPH) S-12.5 MIRL 0.5% up NE RWY 07: Trees. RWY 25: REIL. PAPI(P4L)—GA 3.0° TCH 26'.

Trees.

AIRPORT REMARKS: Attended 1300Z‡-dusk. Arpt unattended all major holidays. PAEW between twy and rwy. PAEW invof twy and ramp. Twy marked with reflectors. ACTIVATE MIRL Rwy 07–25, PAPI Rwy 25 and REIL Rwy 25–CTAF.

COMMUNICATIONS: CTAF/UNICOM 123.0.

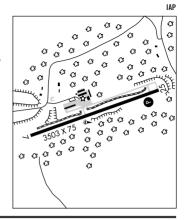
R PITTSBURGH APP/DEP CON 124.75

RADIO AIDS TO NAVIGATION: NOTAM FILE AOO.

ELLWOOD CITY (H) VORTAC 115.8 EWC Chan 105 N40°49.51′

W80°12.69' 253° 21.6 NM to fld.

1227/08W. VOR unusable 090°-140° and 310°-335°



DETROIT

L-29B

## EDDIE DEW MEML AIRPARK (See TORONTO)

# ELLIOTTS LANDING (See MOUNT VICTORY)

**ELYRIA** (1G1) 2 S UTC-5(-4DT) N41°19.89′ W82°06.02′

758 B **FUEL** 100LL NOTAM FILE CLE **RWY 09–27:** H3053X48 (ASPH) LIRL

RWY 09: Tree. RWY 27: Tree.

AIRPORT REMARKS: Unattended. Fuel avbl 24 hrs with credit card.

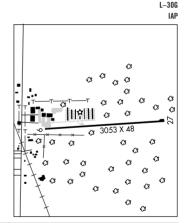
COMMUNICATIONS: CTAF/UNICOM 122.8

R CLEVELAND APP/DEP CON 126.35 CLNC DEL 125.7

RADIO AIDS TO NAVIGATION: NOTAM FILE CLE.

DRYER (H) VOR/DME 113.6 DJB Chan 83 N41°21.48′ W82°09.72′ 125° 3.2 NM to fld. 780/5W. HIWAS

W82°09.72′ 125° 3.2 NM to fld. 780/5W. HIWAS COMM/NAV/WEATHER REMARKS: For IFR clearance ctc Cleveland apch control at 216–898–2040.



FAIRFIELD CO (See LANCASTER)

FAYETTE CO (See WASHINGTON COURT HOUSE)

FETCH N41°12.03′ W80°35.77′ NOTAM FILE YNG.

NDB (LOM) 338 YN 322° 5.1 NM to Youngstown-Warren Rgnl. Unmonitored. LOM unusable byd 10 NM.

DETROIT

DETROIT

813 B FUEL 100LL, JET A NOTAM FILE FDY

R TOLEDO APP/DEP CON 126.1

RADIO AIDS TO NAVIGATION: NOTAM FILE CLE.

FINDLAY (FDY) 1 SW UTC-5(-4DT) N41°00.72′ W83°40.12′

RWY 18-36: H6498X100 (ASPH) S-100, D-160, ST-175, DT-280 HIRL ΙΔΡ RWY 18: REIL. PAPI(P4L)-GA 3.0°TCH 31'. RWY 36: REIL. PAPI(P4L)—GA 3.5°TCH 55'. Trees. RWY 07-25: H5883X100(ASPH) S-100, D-160, ST-175, DT-280 HIRI Residential Area RWY 07: REIL. PAPI(P4L)—GA 3.0°TCH 39'. Thid dsplcd 324'. RWY 25: REIL, PAPI(P4L)—GA 3.5°TCH 36', Thid dsplcd 999', Road. RUNWAY DECLARED DISTANCE INFORMATION RWY 07: TORA-5251 TODA-5251 ASDA-4881 LDA-4558 TORA-5786 TODA-5786 ASDA-5558 LDA-4558 AIRPORT REMARKS: Attended Sep-May Mon-Fri 1200-0100Z‡, Jun-Aug Mon-Fri 1200-0200Z‡, Sat-Sun 1400-2300Z‡. Rwy 07-25 sfc 5498) **3** has cracks and loose aggregate, ACTIVATE HIRL Rwv 07-25 and €3 (3 M **43** Rwy 18-36; REIL Rwy 07, Rwy 25, Rwy 18 and Rwy 36-CTAF. PAPI Rwy 07, Rwy 18, Rwy 25, and Rwy 36 opr 24 hrs. Ldg fee. Δ (3 (3 WEATHER DATA SOURCES: ASOS 124.425 (419) 427-8524. ें द COMMUNICATIONS: CTAF/UNICOM 122.725 RCO 122.65 122.2 RCO 122.1R 108.2T (CLEVELAND RADIO) (CLEVELAND RADIO) R TOLEDO APP/DEP CON 120.8 RADIO AIDS TO NAVIGATION: NOTAM FILE FDY. (L) VORTAC 108.2 FDY Chan 19 N40°57.32′ W83°45.36′ 051° 5.2 NM to fld. 820/2W. MARATHON (T) VORW 114.9 MAH N41°00.89′ W83°39.86′ at fld. Unmonitored. BENTON RIDGE NDB (MHW) 334 BNR N41°01.27′ W83°40.15′ at fld. Unmonitored. FOSTORIA METRO (FZI) 2 NE UTC-5(-4DT) N41°11.45′ W83°23.59′ DETROIT 752 B S4 FUEL 100LL, JET A NOTAM FILE CLE H-11A, L-28J, 29A RWY 09-27: H5005X100 (ASPH) S-30, D-35, DT-52 MIRL IAP RWY 09: REIL. PAPI(P4L)—GA 3.0° TCH 25'. Trees. RWY 27: REIL. PAPI(P4L)-GA 3.0° TCH 25'. Tree. AIRPORT REMARKS: Attended Mon-Sat 1300-2200Z‡. FBO ops Mon-Sat 1200-2100Z‡. PAPI Rwys 09 and 27 on low ints 24 hrs. To increase ints to high click 122.7 7 times. ACTIVATE MIRL Rwy 09-27 and REIL Rwys 09 and 27—CTAF. Rwy 09 REIL OTS indef. Rwy 09 PAPI OTS indef. Twy lgts intermittent. WEATHER DATA SOURCES: AWOS-3 124.625 (419) 436-0053. COMMUNICATIONS: CTAF/UNICOM 122.7 FINDLAY RCO 122.1R 108.2T (CLEVELAND RADIO) R TOLEDO APP/DEP CON 126.1 RADIO AIDS TO NAVIGATION: NOTAM FILE FDY. FINDLAY (L) VORTAC 108.2 FDY Chan 19 N40°57.32′ W83°45.36′ 051° 21.7 NM to fld. 820/2W. NDB (MHW) 379 FZI N41°11.36′ W83°23.83′ at fld. NOTAM FILE CLE. **FREMONT** FREMONT (14G) 2 SW UTC-5(-4DT) N41°19.99′ W83°09.67′ DETROIT 663 B S4 FUEL 80. 100LL NOTAM FILE CLE L-28J IAP RWY 09-27: H4137X60 (ASPH) S-13 LIRL RWY 09: REIL. VASI(NSTD). Thid dspicd 126'. Road. RWY 27: Trees. RWY 18-36: 2238X130 (TURF) RWY 36: P-line. RWY 18: Trees. AIRPORT REMARKS: Attended Mon-Sat 1300Z‡-2200Z‡, Sun 1700Z‡-2200Z‡. For fuel after hrs call 419-332-0046. ACTIVATE LIRL Rwy 09-27; REIL Rwy 09 and rotating bcn-CTAF. COMMUNICATIONS: CTAF/UNICOM 122.8

DETROIT

H-10G, L-28J

WATERVILLE (L) VOR/DME 113.1 VWV Chan 78 N41°27.09′ W83°38.32′ 110° 22.7 NM to fld. 660/2W.

SANDUSKY CO RGNL (S24) 5 SE UTC-5(-4DT) N41°17.74′ W83°02.23° DETROIT 665 B S2 FUEL 100LL, JET A OX 2 NOTAM FILE CLE H-10G, L-28J RWY 06-24: H5500X100 (ASPH) S-30 MIRL RWY 06: REIL. PAPI(P4L)—GA 3.0° TCH 44'. Tree. RWY 24: REIL. PAPI(P4L)-GA 3.0° TCH 42'. AIRPORT REMARKS: Attended 1200-2300Z‡. After hrs call 419-547-0131 or 419-360-3610. Birds and deer on and invof arpt. ACTIVATE MIRL Rwy 06-24-CTAF. Ldg fee for light twin acft 4500 pounds and larger. WEATHER DATA SOURCES: AWOS-3 119.575 (419) 547-6932. COMMUNICATIONS: CTAF/UNICOM 123.05 R MANSFIELD APP/DEP CON 127.35 (360°-180°) 1100-0400Z‡ R CLEVELAND CENTER APP/DEP CON 127.9 (360°-180°) 0400-1100Z‡ R TOLEDO APP/DEP CON 126.1 (180°-360°) RADIO AIDS TO NAVIGATION: NOTAM FILE CLE. (L) VOR/DME 109.2 SKY Chan 29 N41°26.07′ W82°39.29′ 248° 19.2 NM to fld. FULER N40°04.42′ W83°11.89′ NOTAM FILE OSU. DETROIT NDB (MHW/LOM) 515 OS 091° 5.8 NM to Ohio State University. L-29A **FULTON CO** (See WAUSEON) GALION MUNI (GQQ) 3 NE UTC-5(-4DT) N40°45.20′ W82°43.43′ DETROIT 1224 B S4 FUEL 100LL NOTAM FILE CLE 1-294 RWY 05-23: H3505X75 (ASPH) S-12 MIRL IAP RWY 05: REIL. PAPI(P4L)—GA 3.0° TCH 33'. Thid dsplcd 188'. P-line. RWY 23: REIL. VASI(V2L)-GA 3.0° TCH 26'. Trees. AIRPORT REMARKS: Attended Mon-Fri 1300-2200Z‡. Student training activity. Fuel self service-24 hrs with credit card. Rwy 23 VASI OTS indef. ACTIVATE MIRL Rwy 05-23; VASI and REIL Rwy 23; REIL Rwy 05 2300-1100Z‡-CTAF. ACTIVATE PAPI Rwy 05-CTAF. COMMUNICATIONS: CTAF/UNICOM 122.8 MANSFIELD RCO 122.6 122.1R 108.8T (CLEVELAND RADIO) R MANSFIELD APP/DEP CON 124.2 (1100-0400Z‡) CLNC DEL 126.8 CLEVELAND CENTER APP/DEP CON 134.9 (0400-1100Z±) RADIO AIDS TO NAVIGATION: NOTAM FILE MFD. MANSFIELD (L) VORTAC 108.8 MFD Chan 25 N40°52.12′ W82°35.46′ 224° 9.2 NM to fld. 1210/3W. GALLIA-MEIGS RGNL (See GALLIPOLIS) GALLIPOLIS N38°50.01′ W82°09.69′ NOTAM FILE DAY. CINCINNATI NDR (MHW) 420 GAS at Gallia-Meigs Rgnl. VFR only. RCO 121.65 (DAYTON RADIO) **GALLIPOLIS** GALLIA-MEIGS RGNL (GAS) 2 NE UTC-5(-4DT) N38°50.05′ W82°09.81′ CINCINNATI 566 B S2 FUEL 100LL, JET A1+ NOTAM FILE DAY L-26H RWY 05-23: H3998X75 (ASPH) S-30 MIRL IAP RWY 05: PAPI(P2L)—GA 3.0° TCH 40', Fence. RWY 23: REIL, PAPI(P2L)—GA 3.0° TCH 40', Brush. AIRPORT REMARKS: Attended 1400-2200Z‡. FBO CLOSED Thanksgiving, Christmas and New Years Day. Deer and birds on and invof arpt. Rwy 23 REIL OTS indef. ACTIVATE MIRL Rwy 05-23; PAPI Rwys 05 and 23, REIL Rwy 23-CTAF WEATHER DATA SOURCES: AWOS-3 119.925 (740) 446-2149. COMMUNICATIONS: CTAF/UNICOM 123.0 R HUNTINGTON APP/DEP CON 128.4 CLNC DEL 124.55 RADIO AIDS TO NAVIGATION: NOTAM FILE EKN. HENDERSON (H) VORTAC 115.9 HNN Chan 106 N38°45.25′ W82°01.57′ 310° 8 NM to fld. 880/03W. GALLIPOLIS NDB (MHW) 420 GAS N38°50.01′ W82°09.69′ at fld. NOTAM FILE DAY. VFR only. **GARRETTSVILLE** GATES (7D8) 4 N UTC-5(-4DT) N41°21.07′ W81°05.97′ DETROIT 1110 NOTAM FILE CLE Not insp. RWY 08-26: 2800X100 (TURF-GRVL) RWY 08: Fence RWY 26: Trees AIRPORT REMARKS: Attended Apr-Nov dalgt hrs. Ldg PPR only Dec thru Mar call 216-548-4511. Parachute Jumping. Rwy drops 10' on E end. Rwy 26 has 16' hill/brush starting 0' from rwy apch end. COMMUNICATIONS: CTAF 122.9

GATES (See GARRETTSVILLE)

GEAUGA CO (See MIDDLEFIELD)

**GENEVA** 

GERMACK (7D9) 3 SE UTC-5(-4DT) N41°46.67′ W80°54.24′

DETROIT

820 NOTAM FILE CLE

RWY 01-19: H3250X28 (ASPH) LIRL (NSTD)

L-30G

RWY 01: Tree. RWY 19: Trees.

AIRPORT REMARKS: Unattended. Deer on and invof arpt. Radio controlled model acft activity on and invof arpt. No line of sight between rwy ends. Rwy 01-09 rolling sfc. Rwy 01-19 LIRL spacing nstd. ACTIVATE NSTD LIRL Rwy 01-19-CTAF.

COMMUNICATIONS: CTAF 122.9 UNICOM 122.95

RADIO AIDS TO NAVIGATION: NOTAM FILE CLE.

JEFFERSON (L) VOR/DME 115.2 JEN Chan 99 N41°45.61′ W80°44.89′ 284° 7.1 NM to fld. 900/5W.

GENRGETOWN

BROWN CO (GEO) 1 NE UTC-5(-4DT) N38°52.92′ W83°52.97′ CINCINNATI

958 B FUEL 100LL NOTAM FILE DAY

L-26G. 27E

RWY 17-35: H3530X65 (ASPH) MIRL

RWY 35: Road.

AIRPORT REMARKS: Unattended. For airframe and powerplant repairs phone 937-379-1055. Self service fuel avbl 24 hrs with credit card. Aerobatic practice surface to 4500' AGL above Rwy 17-35. ACTIVATE MIRL Rwy 17-35-CTAF.

**COMMUNICATIONS: CTAF 122.9** 

R INDIANAPOLIS CENTER APP/DEP CON 135.575

RADIO AIDS TO NAVIGATION: NOTAM FILE LOU.

FALMOUTH (H) VOR/DME 117.0 FLM Chan 117 N38°38.97′ W84°18.64′ 059° 24.4 NM to fld. 810/4W.

GERMACK (See GENEVA)

GRAND LAKE ST MARYS SPB (See ST MARYS)

GREATER PORTSMOUTH RGNL (See PORTSMOUTH)

GREENE CO-LEWIS A JACKSON RGNL (See DAYTON)

**GREEN SPRINGS** 

WEIKER (82D) 2 SE UTC-5(-4DT) N41°13.75′ W83°01.74′

DETROIT

S4 NOTAM FILE CLE RWY 18-36: 1785X90 (TURF)

RWY 36: Trees.

AIRPORT REMARKS: Attended irregularly. Radio controlled model flying activity on weekends. Rwy 18-36 marked with +2' white and orange waste tubs on E side only: Rwy 18 first 132' has no markers.

COMMUNICATIONS: CTAF 122.9

GRENS N40°00.61′ W83°01.74′ NOTAM FILE CMH.

CINCINNATI

NDB (MHW) 272 CHC 102° 6.4 NM to Port Columbus Intl. OTS indef.

L-29E

GRIFFING-SANDUSKY (See SANDUSKY)

**GRIMES FLD** (See URBANA)

HAMILTON N39°22.37′ W84°34.33′ NOTAM FILE DAY.

CINCINNATI L-27E

NDB (MHW) 260 HAO 107° 2.4 NM to Butler Co Rgnl.

**HAMILTON** BUTLER CO RGNL (HAO) 3 SE UTC-5(-4DT) N39°21.83′ W84°31.32′ CINCINNATI 633 B S4 FUEL 100LL. JET A OX 4 NOTAM FILE HAO H-10G. L-27E RWY 11-29: H5500X100 (ASPH) S-60, D-75, DT-39 MIRL ΙΔΡ RWY 11: REIL. PAPI (P4L)-GA 3.5° TCH 26'. Bldg. RWY 29: MALSR. REIL. PAPI (P4L)-GA 3.0°TCH 25'. P-line. AIRPORT REMARKS: Attended Nov-Mar 1200-0200Z‡, Apr-Oct 1200-0300Z‡, ACTIVATE MIRL Rwy 11-29 and REIL Rwys 11 and 29 and MALSR Rwy 29-CTAF. WEATHER DATA SOURCES: ASOS 121.425 (513) 863-6137 COMMUNICATIONS: CTAF/UNICOM 123.05 R CINCINNATI APP/DEP CON 121.0 CLNC DEL 126.25 RADIO AIDS TO NAVIGATION: NOTAM FILE CVG. CINCINNATI (L) VORTAC 117.3 CVG Chan 120 N39°00.96′ W84°42.20′ 026° 22.5 NM to fld. 879/04W. HAMILTON NDB (MHW) 260 HAO N39°22.37′ W84°34.33′ 107° 2.4 NM to fld. NOTAM FILE DAY. ILS/DME 109.75 I-RQF Chan 34(Y) Rwy 29. Class IT. LOC unusable byd 20° right of course. HARDIN CO (See KENTON) HARLAN AIRFIELD (See LAGRANGE) HARRISON CINCINNATI WEST (167) 2 E UTC-5(-4DT) N39°15.54′ W84°46.46′ CINCINNATI 584 B S4 FUEL 100LL NOTAM FILE DAY 1-27F RWY 01-19: H2803X60 (ASPH) MIRL IAP RWY 19: Thid dspicd 220'. Tree. RWY N1. Thid denied 308' P-line RWY 09-27: 1809X100 (TURF) RWY N9. Tree RWY 27: Tree. AIRPORT REMARKS: Attended Oct-Apr 1300Z‡-dusk, May-Sep 1300-0100Z‡. Unattended all major holidays. For Jet A availability call 513-367-0231. Rwy 09-27 CLOSED indef. COMMUNICATIONS: CTAF/UNICOM 123.0 R APP/DEP CON 128.7 RADIO AIDS TO NAVIGATION: NOTAM FILE CVG. (L) VORTAC 117.3 CVG Chan 120 N39°00.96' W84°42.20' 351° 14.9 NM to fld. 879/04W. HARRISON CO (See CADIZ) HARRY CLEVER FLD (See NEW PHILADELPHIA) HENRY CO (See NAPOLEON) HENDERSON (WV) N38°45.25′ W82°01.57′ NOTAM FILE EKN. CINCINNATI (H) VORTAC 115.9 HNN Chan 106 334° 39.5 NM to Vinton Co. 860/3W. H-10G, L-22F DME portion unusable 185°-194° byd 10 NM blo 8000′; 195°-204° byd 30 NM blo 8000′. HIGHLAND CO (See HILLSBORO) HILLSBORO N39°11.08′ W83°32.58′. NOTAM FILE DAY. CINCINNATI NDB (MHW) 278 HOC at Highland Co. I-29A RCO 122.2 (DAYTON RADIO) HILLSBORN **HIGHLAND CO** (HOC) 3 SE UTC-5(-4DT) N39°11.33′ W83°32.33′ CINCINNATI 977 B S4 FUEL 100LL, JET A TPA-1677(700) NOTAM FILE DAY L-29A RWY 05-23: H3520X75 (ASPH) S-25 MIRL 1.3% UP SW IAP RWY 05: Trees RWY 23: REIL. PAPI (P2L). Trees. AIRPORT REMARKS: Attended Mon-Sat 1300-2200Z‡, Sun 1700-2200Z‡, Rwy 05-23 lgts NW side OTS indef. Rwy 23 REIL OTS indef. ACTIVATE MIRL Rwv 05-23 and REIL Rwv 23-CTAF. WEATHER DATA SOURCES: AWOS-3 118.175 (937) 393-9038. COMMUNICATIONS: CTAF/UNICOM 123.05 HILLSBORO RCO 122.2 (DAYTON RADIO) INDIANAPOLIS CENTER APP/DEP CON 134.0 RADIO AIDS TO NAVIGATION: NOTAM FILE LOU. YORK (L) VORTAC 112.8 YRK Chan 75 N38°38.65′ W82°58.70′ 326° 41.9 NM to fld. 1040/5W. HILLSBORO NDB (MHW) 278 HOC N39°11.08′ W83°32.58′ at fld. NOTAM FILE DAY.

EC, 17 DEC 2009 to 11 FEB 2010

HINDE (see HURON)

HOGAF N41°34.45′ W81°28.27′ NOTAM FILE CGF.

NDB (LMM) 521 GF at Cuyahoga Co. Shutdown.

HOLLISTER FIELD (See WILMINGTON)

HOLMES CO (See MILLERSBURG)

 HOOK FLD
 N39°29.93′ W84°26.85′
 NOTAM FILE DAY.
 CINCINNATI

 NDB (MHW) 239
 HKF
 054° 3.1 NM to Middletown Rgnl/Hook Fld. NDB OTS indef.
 L-27E

**HUBBARD** N41°09.17′ W80°31.89′ NOTAM FILE CLE.

NDB (MHW) 408 HBD 259° 4.2 NM to Lansdowne.

DETROIT L-30H

HURON

HINDE (88D) 3 NW UTC-5(-4DT) N41°24.22′ W82°36.08′

DETROIT

609 NOTAM FILE CLE **RWY 11-29:** 2500X70 (TURF)

RWY 11: Road. RWY 29: Brush.

AIRPORT REMARKS: Unattended. Arpt CLOSED at ngt. Rwy soft when wet.

**COMMUNICATIONS: CTAF 122.9** 

**JACKSON** 

JAMES A RHODES (143) 5 SE UTC-5(-4DT) N38°58.88′ W82°34.67′

CINCINNATI H-10g. L-29A

726 B S4 **FUEL** 100LL, JET A1+ NOTAM FILE DAY **RWY 01-19**: H5201X75 (ASPH) MIRL

RWY 01: Thid dspicd 331'. Tree.

RWY 19: REIL. VASI(S2L). P-line.

AIRPORT REMARKS: Attended 1300-2100Z‡. MIRL Rwy 01-19 preset low ints dusk-dawn, to increase ints and ACTIVATE—CTAF. Rwy 19 REIL OTS indef.

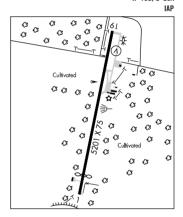
WEATHER DATA SOURCES: AWOS-3 118.825 (740) 286-1760.

COMMUNICATIONS: CTAF/UNICOM 122.7

R HUNTINGTON APP/DEP CON 128.4

RADIO AIDS TO NAVIGATION: NOTAM FILE EKN.

HENDERSON (H) VORTAC 115.9 HNN Chan 106 N38°45.25′ W82°01.57′ 301° 29.2 NM to fld. 880/03W.



JAMES A RHODES (See JACKSON)

JAMES M COX DAYTON INTL (See DAYTON)

**JAMESTOWN** 

**BLOOM** (14I) 2 SW UTC-5(-4DT) N39°38.00′ W83°45.00′

CINCINNATI

1050 TPA—1850(800) NOTAM FILE DAY

RWY 06-24: 1220X80 (TURF)

RWY 06: Pole. RWY 24: Pole.

AIRPORT REMARKS: Unattended.

COMMUNICATIONS: CTAF 122.9

JEFFERSON CO AIRPARK (See STEUBENVILLE)

JEFFERSON N41°45.61′ W80°44.89′ NOTAM FILE CLE.

DETROIT

(L) VOR/DME 115.2 JFN Chan 99 070° 2.6 NM to Ashtabula Co. 900/5W.

DME unusable:

085°-125° byd 35 NM blo 3500′ 126°-190° byd 20 NM blo 3500′ 191°-230° all alts and distances 231°-260° byd 30 NM blo 3500′

RCO 122.1R 115.2T (CLEVELAND RADIO)

KELLEYS ISLAND LAND FLD (89D) 1 NE UTC-5(-4DT) N41°36.17′ W82°41.08′ DETROIT NOTAM FILE CLE RWY 18-36: H2270X35 (ASPH) LIRL RWY 18. Bldg RWY 36: Trees RWY 09-27: H2203X50 (ASPH) LIRL RWY 09: Trees. RWY 27: Tree. AIRPORT REMARKS: Unattended. Rwy 18-36 CLOSED indef. Rwy 09-27 pavement poor-weathered with cracks. Ldg COMMUNICATIONS: CTAF 122.9 **KENT STATE UNIV** (1G3) 3 W UTC-5(-4DT) N41°09.08′ W81°24.91′ DETROIT 1134 B S4 FUEL 100LL, JET A1+ TPA-1984(850) NOTAM FILE CLE L-30G RWY 01-19: H4000X60 (ASPH) MIRL 0.4% up N IAP RWY 01: REIL. VASI(V4L)—GA 3.5° TCH 42'. Thid dsplcd 49'. Trees. RWY 19: REIL, VASI(V4L)-GA 3.0° TCH 35', Trees. a AIRPORT REMARKS: Attended Mon-Fri 1130Z±-dusk, Sat-Sun Œ 1300Z‡-dusk, Self svc fuel avbl. Self svc fuel OTS indef, Ramp ଫ ଫ ଫ G G G fee for multi-engine and turbine powered acft-waived with fuel (3 purchase. Deer on and invof arpt. For noise abatement a **43** C3 C3 43 procedures ctc arpt manager on 330-672-1943. ACTIVATE MIRL a G G 03 C3 C3 Rwy 01-19; VASI and REIL Rwy 01 and Rwy 19-122.9. Rwy 01 €3 8 ¢ a and Rwy 19 REIL OTS indef. <3 €3 COMMUNICATIONS: CTAF/UNICOM 122.725 000 €3 €3 (R) AKRON-CANTON APP/DEP CON 118.6 (1100-0500Z‡) ଓ ଓ ଓ CINC DEL 125.65 Œ n (R) CLEVELAND CENTER APP/DEP CON 120,775 (0500-1100Z±) ୍ଦ ଓ ଓ €3 a a a a a a RADIO AIDS TO NAVIGATION: NOTAM FILE CAK. Ø AKRON (L) VOR/DME 114.4 ACO Chan 91 N41°06.47' C3 C3 ß W81°12.09' 289° 10 NM to fld. 1194/4W. €3 Œ Œ €3 AKRON NDB (MHW/LOM) 362 AK N41°04.19' W81°23.25' 63 3539 03 Œ Ø 5.1 NM to fld. NOTAM FILE CLE. "<sub>ຜັດ</sub> ດີດ່ Œ KENTON HARDIN CO (I95) 3 SW UTC-5(-4DT) N40°36.64′ W83°38.62′ DETROIT B S4 FUEL 100LL, JET A1+ TPA-2024(1000) NOTAM FILE DAY L-27E RWY 04-22: H4201X75 (ASPH) S-19 MIRL 0.5% up SW ΙΔΡ RWY 04: Fence. RWY 22: Road. AIRPORT REMARKS: Attended Sat-Sun 1400-2000Z±, May-Oct Mon-Fri 1300-0100Z±, Nov-Apr Mon-Fri 1400-2300Z‡. Birds on and invof arpt. ACTIVATE MIRL Rwy 04-22-CTAF. COMMUNICATIONS: CTAF/UNICOM 122.8 INDIANAPOLIS CENTER APP/DEP CON 128.075 RADIO AIDS TO NAVIGATION: NOTAM FILE FDY. FINDLAY (L) VORTAC 108.2 FDY Chan 19 N40°57.32′ W83°45.36′ 168° 21.3 NM to fld. 820/2W. ALLEN CO (T) VOR 108.4 AOH N40°42.43′ W83°58.09′ 115° 15.9 NM to fld. NOTAM FILE DAY. VOR portion unusable 091°-109° byd 20 NM. KIRILA HELIPORT (See BROOKFIELD) KNOX CO (See MOUNT VERNON) KOONS (See SALEM) LAGRANGE HARLAN AIRFIELD (92D) 2 S UTC-5(-4DT) N41°12.17′ W82°06.91′ DETROIT 843 TPA-1843(1000) NOTAM FILE CLE RWY 09-27: 2670X95 (TURF) RWY 09: P-line. RWY 27: Trees RWY 18-36: 1410X95 (TURF) AIRPORT REMARKS: Attended irregularly. Arpt occasionally CLOSED for radio controlled model flying. Req blind call on 122.9 at arrival and departure as safety procedure. Rwy 36 has no line of sight with Rwy 09 and Rwy 27 ends. Rwv 18-36 marked with white tires.

**COMMUNICATIONS: CTAF 122.9** 

LAKEFIELD (See CELINA)

LAKELAND N41°40.95′ W81°22.74′ NOTAM FILE CLE.

NDB (MHW) 263 LQL at Willoughby Lost Nation Muni. NDB unmonitored.

DETROIT L-30G

#### LANCASTER

FAIRFIELD CO (LHQ) 3 NW UTC-5(-4DT) N39°45.34′ W82°39.43′

CINCINNATI H-10G, L-29A

CINCINNATI

L-27E

IAP

868 B S4 FUEL 100LL, JET A1 + NOTAM FILE LHQ RWY 10-28: H5004X75 (ASPH) S-25.5, D-38.5 MIRL

RWY 10: REIL. PAPI(P4L)-GA 3.0°. Trees.

RWY 28: REIL. PAPI(P4L)-GA 3.0°. Thid dsplcd 279'. Road.

AIRPORT REMARKS: Attended 1300Z‡-dark. Arpt unattended Christmas, New Years and Thanksgiving. Fuel available 24 hrs with credit card. Run up area N end Rwy 28 closed permanently. Rwy 28 calm wind preferred rwy. MIRL Rwy 10-28 preset on low ints; to increase ints and ACTIVATE REILS Rwy 10 and Rwy 28-122.725. Rwy 28 PAPI operates 24 hours.

WEATHER DATA SOURCES: ASOS 118.375 (740) 681-1097.

COMMUNICATIONS: CTAF/UNICOM 122.725

APPLETON RCO 122.1R 116.7T (DAYTON RADIO)

R COLUMBUS APP/DEP CON 132.3 CLNC DEL 121.65

RADIO AIDS TO NAVIGATION: NOTAM FILE DAY.

APPLETON (H) VORTAC 116.7 APE Chan 114 N40°09.07′ W82°35.30′ 194° 23.9 NM to fld. 1360/6W.

CASER NDB (LOM) 338 LH N39°44.93′ W82°32.12′ 280° 5.7 NM to fld. Unmonitored.

Rwy 28. ILS 111.9 I-LHQ LOM CASER NDB. LOC only. LOM unmonitored. LOC unmonitored.

LANSDOWNE (See YOUNGSTOWN)

#### LAWRENCE CO AIRPARK (See CHESAPEAKE-HUNTINGTON WVA)

**LEBANON-WARREN CO** (I68) 3 NW UTC-5(-4DT) N39°27.73′ W84°15.11′ 898 B S4 FUEL 100LL, JET A OX 1 NOTAM FILE DAY

RWY 01-19: H4502X65 (ASPH) S-30, D-41 RWY MIRL (NSTD) 0.3% up N

RWY 01: REIL. PAPI(P4R). Thid dsplcd 630'. P-line. Rgt tfc. RWY 19: REIL. PAPI(P4L). Thid dsplcd 410' (dalgt). Trees.

AIRPORT REMARKS: Attended 1230-0300Z‡. PAEW adjacent rwy and twy indef. NSTD MIRL Rwy 01-19, not located at correct place adjacent to dsplcd thld markings. Rwy 19 dsplcd thld not lgtd. Rwy 01 dsplcd thid at the 630' mark is not lgtd. The former dsplcd thid at 363' mark is Igtd for night ops. Rwy 19 PAPI OTS indef. Rwy 01 REIL OTS indef. ACTIVATE MIRL Rwy 01-19-123.075.

WEATHER DATA SOURCES: AWOS-3 120.55 (513) 934-5500.

COMMUNICATIONS: CTAF/UNICOM 123.075

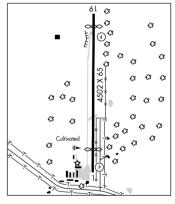
- (R) DAYTON APP CON 126.5 (091°-180°) 118.85 127.225
- R DAYTON DEP CON 126.5 (091°-180°)

DAYTON CLNC DEL 119.4 (937) 454-7282

RADIO AIDS TO NAVIGATION: NOTAM FILE FFO.

MIDWEST (T) VORW/DME 112.9 MXO Chan 76 N39°25.78' W83°48.07' 279° 21 NM to fld 1050/4W.

ONIDA NDB (LOM) 223 MW N39°34.69′ W84°19.42′ 159° 7.7 NM to fld. NOTAM FILE DAY. Unmonitored.



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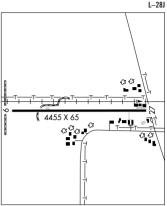
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# LEIPSIC

RWY 09: Railroad.

agriculture planes. For LIRL Rwy 09-27 call 419-943-3352. Rwy 09-27 NSTD LIRL. Thid lgtd with 360° green lgts and Rwy lgts S side offset 20'.

FINDLAY (L) VORTAC 108.2 FDY Chan 19 N40°57.32' W83°45.36' 306° 16.1 NM to fld. 820/2W.



DETROIT

DETROIT

ΙΔΡ

H-10G. L-27E

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C3 C3

LIMA ALLEN CO (AOH) 5 SE UTC-5(-4DT) N40°42.42′ W84°01.60′

975 B S4 FUEL 100LL, JET A1 + OX 1 NOTAM FILE AOH

RWY 09-27: H5149X150 (ASPH) D-60 HIRL 0.5% up E.

RWY 09: Thid dspicd 138'. Tree.

RWY 27: REIL, PAPI(P4R)-GA 3.0° TCH 46'.

RWY 14-32: 3994X150 (TURF-ASPH)

RWY 14: Pole. RWY 32: Tree.

AIRPORT REMARKS: Attended Mon-Thr 1100-0100Z±. Fri

1100-2300Z‡, Sat 1400-2000Z‡, Sun 1600-2000Z‡. Rwy 14-32 CLOSED winters, Rwv 14-32 first 600' Rwv 32 paved 150' wide. ACTIVATE HIRL Rwy 09-27 and REIL Rwy 27-CTAF.

WEATHER DATA SOURCES: ASOS 108.4 AOH (419) 224-6098.

COMMUNICATIONS: CTAF/UNICOM 122.7

ALLEN CO RCO 122.1R 108.4T (DAYTON RADIO)

INDIANAPOLIS CENTER APP/DEP CON 128.075

RADIO AIDS TO NAVIGATION: NOTAM FILE DAY.

FINDLAY (L) VORTAC 108.2 FDY Chan 19 N40°57.32' W83°45.36′ 222° 19.3 NM to fld. 820/2W.

NOTAM FILE FDY.

ALLEN CO (T) VOR 108.4 AOH N40°42.43′ W83°58.09′ 274° 2.7 NM to fld. ASOS.

VOR portion unusable 091°-109° byd 20 NM.

NDB (MHW) 362 LYL N40°42.27′ W84°01.40′ at fld. Unmonitored. SHUTDOWN.

IL\$ 109.3 I-AOH Rwy 27. LOC unusable byd 25° left side of course. ILS unmonitored.

**LONDON** N39°55.89′ W83°27.84′ NOTAM FILE DAY.

NDB (MHW) 263 UYF at Madison Co.

CINCINNATI

L-29A

**RUHE'S** (R47) 3W UTC-5(-4DT) N41°06.19' W84°03.11' 801 S4 NOTAM FILE CLE RWY 09-27: H4455X65 (ASPH) LIRL (NSTD)

RWY 27: Antenna.

AIRPORT REMARKS: Attended dalgt hrs. Field primary for

dusting/spraying ops. Most tkfs to W; Idgs E; no tfc pattern for

COMMUNICATIONS: CTAF/UNICOM 123.0

RADIO AIDS TO NAVIGATION: NOTAM FILE FDY.



LONDON

MADISON CO (UYF) 3N UTC-5(-4DT) N39°55.96′ W83°27.72′ 1082 B S4 FUEL 100LL, JET A1+ NOTAM FILE DAY

RWY 09-27: H4001X75 (ASPH) S-30, D-40 MIRL 0.8% up W RWY 09: REIL. PAPI(P4L)-TCH 31'.

RWY 27: REIL. PAPI(P4L)-TCH 31'. Trees.

AIRPORT REMARKS: Attended Mon-Fri 1300-2100Z‡, Sat-Sun 1400-2200Z‡. 24 hr self svc fuel after hrs. ACTIVATE MIRL Rwy 09-27 and PAPI and REIL Rwys 09 and 27-CTAF.

COMMUNICATIONS: CTAF/UNICOM 123.0

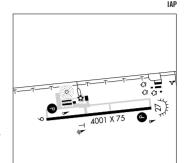
R DAYTON APP CON 126.5 (091°-180°) 118.85 127.225

(R) DAYTON DEP CON 126.5 (091°-180°)

RADIO AIDS TO NAVIGATION: NOTAM FILE FFO.

SPRINGFIELD (T) VORW/DME 113.2 SGH Chan 79 N39°50.19' W83°50.70' 076° 18.6 NM to fld. 1047/4W.

LONDON NDB (MHW) 263 UYF N39°55.89' W83°27.84' at fld. NOTAM FILE DAY.



CINCINNATI

L-29A

DETROIT

IAP

H-10G, L-30G

LORAIN CO RGNL (See LORAIN/ELYRIA)

LORAIN (ELYRIA)

LORAIN CO RGNL (LPR) 6 S UTC-5(-4DT) N41°20.66′ W82°10.66′

793 B S4 FUEL 100LL, JET A TPA-1793(1000) NOTAM FILE LPR

RWY 07-25: H5002X100 (ASPH-GRVD) S-80. D-110. ST-175. DT-180 HIRL

RWY 07: MALSR. PAPI(P4L)-GA 3.0° TCH 54'.

RWY 25: REIL, PAPI(P4L)—GA 3.0° TCH 40', Trees, Rgt tfc.

AIRPORT REMARKS: Special Air Traffic Rules-Part 93, see Regulatory Notices. Attended Mon-Fri 1200-0400Z‡, Sat-Sun 1200-0300Z‡. Birds; coyotes and deer on and invof arpt. Pilots opr in Oberlin area req to avoid and remain well clear of Oberlin College due to music conservatory. All tfc ops N of arpt as per FAR

Part 93, Subpart J. HIRL Rwy 07-25 preset low ints, to increase ints and ACTIVATE MALSR Rwy 07-CTAF.

WEATHER DATA SOURCES: ASOS 121.425 (440) 323-7088.

COMMUNICATIONS: CTAF/UNICOM 122.7

(R) CLEVELAND APP/DEP CON 126.35 CLNC DEL 125.7

RADIO AIDS TO NAVIGATION: NOTAM FILE CLE.

DRYER (H) VOR/DME 113.6 DJB Chan 83 N41°21.48' W82°09.72' 226° 1.1 NM to fld. 780/5W. HIWAS. IL\$ 111.7 I-LQG Rwy 07.

COMM/NAV/WEATHER REMARKS: For IFR clearance ctc Cleveland apch control at 216-898-2040.

LOST NATION N41°41.06′ W81°23.37′. NOTAM FILE CLE.

(T) VORW/DME 110.2 LNN Chan 39 at Willoughby Lost Nation Muni. 620/8W. Unmonitored. VOR portion unusable 030°-094°; 135°-224°. DME portion unusable byd 20 NM.

MADEIRA N39°13.37′ W84°21.32′ NOTAM FILE LUK.

NDB (MHW) 379 MDE 206° 7.7 NM to Cincinnati Muni Arpt Lunken Fld. Unmonitored when twr clsd.

CINCINNATI L-27E

DETROIT

L-30G

MADISON CO (See LONDON)

MAD RIVER INC (See TREMONT CITY)

**MANNS** N40°45.97′ W82°26.70′ NOTAM FILE MFD.

NDB (MHW/LOM) 372 MF 321° 4.7 NM to Mansfield Lahm Rgnl.

DETROIT L-29A

131°-339° byd 12 NM

MANSFIELD LAHM RGNL (MFD) 3 N UTC-5(-4DT) N40°49.29′ W82°31.00′ DETROIT 1297 B S4 FUEL 100LL, JET A Class IV, ARFF Index A NOTAM FILE MFD H-10G I-29A RWY 14-32: H9001X150 (ASPH-GRVD) S-150, D-185, ST-175, DT-300 HIRL IAP, AD RWY 14: PAPI(P4L)—GA 3.0° TCH 42'. Road. 0.9% up. RWY 32: MAI SR Trees 3 3 3 3 3 3 3 3 3 3 00 RWY 05-23: H6795X150 (ASPH-GRVD) S-90, D-96, ST-175, DT 150 HIRI RWY 05: REIL. PAPI(P4L)-GA 3.0° TCH 50. RWY 23: REIL. PAPI(P4L)-GA 3.0° TCH 45'. Trees. ☼ LAND AND HOLD SHORT OPERATIONS 333 C3 C2 ୍ଦି <sup>ଫ</sup> €3 IANDING **DIST AVRI** HOLD SHORT POINT Ø RWY N5 14-32 4350 Œ 3 **RWY 14** 05-23 6100 €3 0.0000 3 RUNWAY DECLARED DISTANCE INFORMATION G G Ġ n RWY 05: TORA-6795 TODA-6795 ASDA-6795 LDA-6795 'જ 000000 RWY 14: TORA-9001 TODA-9001 ASDA-9001 LDA-9001 RWY 23: TORA-6795 TODA-6795 ASDA-6795 LDA-6795 3 3 3 3 3 ( RWY 32: TORA-9001 TODA-9001 ASDA-9001 LDA-9001 AIRPORT REMARKS: Attended 1200-0400Z‡. Deer and birds and waterfowl on and invof arpt. Two hrs PPR for air carrier ops with more than 30 passenger seats call 419-522-2191. Acft on either 00 end of Rwy 05-23 and Rwy 14-32 cannot be seen on the other end due to rwy grade. Acft larger than a "G1" or with a wing span greater than 80' (tip to tip) are restricted on Twys G/H/J/L/M/N and should use the main ramp area. When twr clsd ACTIVATE HIRL Rwy 05-23 and Rwy 14-32; MALSR Rwy 32; REIL Rwys 05 and 23-CTAF, Rwy 32 RVR avbl. Ldg fees on all commercial oprs invoiced on monthly basis: for other arrangements contact arpt manager on 419-522-2191. WEATHER DATA SOURCES: ASOS (419) 522-1375, LAWRS. COMMUNICATIONS: CTAF 119.8 ATIS 125.3 UNICOM 122.95 RCO 122.1R 108.8T (CLEVELAND RADIO) RCO 122 6 (CLEVELAND RADIO) (R) APP/DEP CON 124.2 127.35 (1100-0400Z‡) (R) CLEVELAND CENTER APP/DEP CON 134.9 (0400-1100Z±) TOWER 119.8 (1100-0400Z±) GND CON 121.8 AIRSPACE: CLASS D svc effective 1100-0400Z tother times CLASS G. RADIO AIDS TO NAVIGATION: NOTAM FILE MFD. (L) VORTAC 108.8 MFD Chan 25 N40°52.12′ W82°35.46′ 133° 4.4 NM to fld. 1210/3W. MANNS NDB (MHW/LOM) 372 MF N40°45.97′ W82°26.70′ 321° 4.7 NM to fld ILS 110.5 I-MFD Rwy 32. Class IA. LOM MANNS NDB. Unmonitored when twr clsd. LOC unusable from 0.3 NM to thid. ASR (1100-0400Z±) . . . . . HELIPAD H2: H24X24 (ASPH) HELIPORT REMARKS: Helipad H2 perimeter lgts. MANTUA MILLS (7E3) 3 SW UTC-5(-4DT) N41°14.30′ W81°15.23′ DETROIT 1140 NOTAM FILE CLE RWY 03-21: 2640X60 (TURF) RWY 03: Tree. RWY 21: P-lines. AIRPORT REMARKS: Unattended. **COMMUNICATIONS: CTAF 122.9** MARATHON N41°00.89′ W83°39.86′. NOTAM FILE FDY. DETROIT (T) VORW 114.9 MAH at Findlay. Unmonitored. L-28J VOR unusable 340°-067° 068°-078° byd 12 NM 085°-135° 079°-130° byd 12 NM

079°-130°

MARION MUNI (MNN) 3 NE UTC-5(-4DT) N40°36.98′ W83°03.81′ DETROIT 993 B S4 FUEL 80, 100LL, JET A1 + TPA-1793(800) NOTAM FILE MNN H-10G, L-29A RWY 07-25: H5000X100 (ASPH-GRVD) S-70, D-95, ST-121, DT-150 MIRL ΙΔΡ RWY 07: REIL. PAPI(P4L)—GA 3.0° TCH 24'. Road. RWY 25: REIL, PAPI(P4L)-GA 3.0° TCH 31', Trees. **RWY 13-31**: H3498X100 (ASPH-GRVD) S-56, D-68, ST-86, DT-105 MIRI RWY 13: REIL. PAPI(P2L)-GA 3.0° TCH 21'. Trees. RWY 31: REIL. PAPI(P2L)-GA 3.0° TCH 21'. Acft. AIRPORT REMARKS: Attended 1300-2200Z‡. Glider activity on and invof arpt. Gliders and towplanes use rgt tfc pattern for Rwy 07 and Rwy 31. Transient acft follow ramp signs to main ramp. Twy D cannot be used to taxi between rwy and ramp area by acft with wingspan greater than 35'. After 0500Z‡ ACTIVATE MIRL Rwy 07-25 and Rwy 13-31: REIL Rwv 07: Rwv 25: Rwv 13 and Rwv 31-CTAF. WEATHER DATA SOURCES: ASOS 119.975 (740) 383-3400. SAWRS. COMMUNICATIONS: CTAF/UNICOM 122.8 R MANSFIELD APP/DEP CON 124.2 (1100-0400Z‡) CLNC DEL 126.8 CLEVELAND CENTER APP/DEP CON 135.1 (0400-1100Z‡) RADIO AIDS TO NAVIGATION: NOTAM FILE MFD. MANSFIELD (L) VORTAC 108.8 MFD Chan 25 N40°52.12′ W82°35.46′ 238° 26.3 NM to fld. 1210/3W. BUCKEYE (T) VORW 109.8 BUD N40°37.00′ W83°03.83′ at fld. NOTAM FILE MNN. NDB (MHW) 201 MNN N40°37.03′ W83°04.20′ at fld. Unusable byd 15 NM. NOTAM FILE MNN. SHUTDOWN. ILS/DME 110.35 I-AEF Chan 40Y Rwy 25. LOC only.

# **MARYSVILLE**

COMMUNICATIONS: CTAF/UNICOM 122.8

R COLUMBUS APP/DEP CON 120.2

RADIO AIDS TO NAVIGATION: NOTAM FILE DAY.

ROSEWOOD (H) VORTAC 117.5 ROD Chan 122 N $40^{\circ}17.27'$  W8 $4^{\circ}02.59'$  102° 32 NM to fld. 1080/5W. COMM/NAV/WEATHER REMARKS: AWOS-3 unusable byd 6 NM.

MAYFIELD (See AKRON)

# Mcarthur

VINTON CO (22I) 5 NE UTC-5(-4DT) N39°19.69′ W82°26.51′

958 B FUEL 100LL NOTAM FILE DAY

RWY 09-27: H3725X75 (ASPH) MIRL

RWY 09: Trees. RWY 27: PAPI(2PL). Trees.

AIRPORT REMARKS: Attended irregularly. For fuel call 740–357–0268 or 740–596–0002. Occasional deer and geese on and invof arpt. ACTIVATE MIRL Rwv 09–27—122.9.

COMMUNICATIONS: CTAF/UNICOM 122.8

RADIO AIDS TO NAVIGATION: NOTAM FILE EKN.

**HENDERSON (H) VORTAC** 115.9 HNN Chan 106 N38°45.25′ W82°01.57′ 334° 39.5 NM to fld. 880/3W.

L-29A œ<sup>©</sup> €3 63 €3 a €3 Œ C3 Œ €3 ß 63 Ø a €3 Ø  $\sim$ 3 €3 Œ €3 **43 (3** €3 333 **43** €3 63 C3 C3 (3 €3 3725 X 75 €3 €3 a a ଫ ଫ €3 €3 63 **43** €3 €3 C3 €3 €3 €3 ß €3 (3 03 €3 G G C3 **3** 3 (3 (3 Œ €3 **3** 3

CINCINNATI

## McCONNELSVILLE

MORGAN CO (I71) 3 E UTC-5(-4DT) N39°39.26′ W81°48.19′

TPA-1800(800) NOTAM FILE CLE 1000 B FUEL 100LL

RWY 12-30: H3500X65 (ASPH) S-12 MIRL

RWY 12: Thid dsplcd 350'. Road. RWY 30: REIL. Tree.

AIRPORT REMARKS: Unattended. For fuel use phone in Administration Building and refer to list above phone. Rwy 12-30 sfc has loose

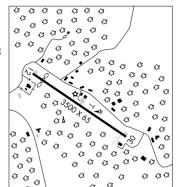
aggregate, large cracks with grass growing through them. Rotating bcn OTS indef. ACTIVATE MIRL Rwv 12-30 and REIL Rwv

30-CTAF.

COMMUNICATIONS: CTAF/UNICOM 122.8

RADIO AIDS TO NAVIGATION: NOTAM FILE 77V

ZANESVILLE (L) VOR/DME 111.4 ZZV Chan 51 N39°56.45' W81°53.56' 172° 17.7 NM to fld. 900/6W.



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CINCINNATI

L-29B

MEDINA MUNI (1G5) 4 E UTC-5(-4DT) N41°07.89′ W81°45.90′

1190 B S4 FUEL 100LL NOTAM FILE CLE

RWY 09-27: H3556X75 (ASPH) S-30 MIRL 0.4% up E

03 C3

RWY 09: PAPI (P4L). Trees. RWY 27: REIL. PAPI (P4L)—GA 3.5° TCH 30'. RWY 01-19: H2867X60 (ASPH) S-25 MIRL 0.7% up N

RWY 01: PAPI (P4L), P-line. RWY 19: PAPI (P4L), Thid dsplcd 737', Trees.

AIRPORT REMARKS: Attended 1300Z‡-dusk. Deer on and invof arpt. PAEW twys. Rwy 09-27 has severe cracking with much foreign object damage potential. Rwy 09 PAPI OTS indef. MIRL Rwy 09-27, MIRL Rwy 01-19, PAPI Rwys 09, 27, 01 and 19 opr dusk-0300Z‡; after 0300Z‡ ACTIVATE-CTAF.

COMMUNICATIONS: CTAF/UNICOM 123.0

R CLEVELAND APP/DEP CON 125.35 RADIO AIDS TO NAVIGATION: NOTAM FILE CLE.

DRYER (H) VOR/DME 113.6 DJB Chan 83 N41°21.48′ W82°09.72′ 132° 22.5 NM to fld. 780/5W. HIWAS.

METCALF FLD (See TOLEDO)

MIAMI UNIVERSITY (See OXFORD)

MIDDLE BASS-EAST POINT (See MIDDLE BASS ISLAND)

#### MIDDLE BASS ISLAND

MIDDLE BASS-EAST POINT (3W9) 1 NE UTC-5(-4DT) N41°41.67′ W82°47.79′ DETROIT

DETROIT

1-306

IAP

582 NOTAM FILE CLE

RWY 09-27: 2085X67 (TURF)

RWY 27: Trees. Rgt tfc. RWY N9. Berm

AIRPORT REMARKS: Attended May-Oct irregularly, unattended Nov-Apr. Rwy soft and wet in spring. Numerous trees and buildings in close proximity of rwy. Be alert: Expect significant windshear and turbulence on apch and departure when winds exceed 10 Kt speed.

COMMUNICATIONS: CTAF 122 9

MIDDLE BASS ISLAND (3T7) 1 NE UTC-5(-4DT) N41°41.11′ W82°48.29′

DETROIT

580 TPA-1580 (1000)

RWY 10-28: H1852X75 (ASPH)

RWY 10: PAPI(P4L). Thid dsplcd 52'. Building. Rgt tfc.

RWY 28: PAPI(P4L), Ground.

AIRPORT REMARKS: Unattended. All tfc patterns remain S of arpt.

COMMUNICATIONS: CTAF/UNICOM 122.8

#### MIDDLEFIELD

GEAUGA CO (7G8) 1 SE UTC-5(-4DT) N41°26.98′ W81°03.78′

1174 B FUEL 100LL TPA-2199(1025) NOTAM FILE CLE

DETROIT L-30G

**RWY 11–29**: H3500X65 (ASPH) S–18.5 HIRL 0.5% up W.

RWY 11: REIL. TRCV (TRIR). Thid dspicd 180'. Tank. RWY 29: REIL. TRCV (TRIL). Trees.

AIRPORT REMARKS: Unattended. Use care when taxiing on ramp, loose gravel and rough areas. ACTIVATE HIRL Rwy 11–29 and REIL Rwy 11 and Rwy 29—CTAF. Rwy 11 and Rwy 29 TRCV OTS indef. Ultralight ops conduct a close-in 500' AGL rgt hand pattern during dalgt hrs. Parallel twy clsd permanently, E of T-hangars.

COMMUNICATIONS: CTAF/UNICOM 123.0

CHARDON RCO 122.1R 112.7T (CLEVELAND RADIO)

R CLEVELAND APP/DEP CON 125.35

RADIO AIDS TO NAVIGATION: NOTAM FILE CLE.

CHARDON (H) VOR/DME 112.7 CXR Chan 74 N41°31.02′ W81°09.79′ 137° 6.1 NM to fld. 1310/5W.

COMM/NAV/WEATHER REMARKS: For IFR clearance ctc Cleveland apph control at 216–898–2040.

MIDDLETOWN RGNL/HOOK FLD (MWO) 2 N UTC-5(-4DT) N39°31.91′ W84°23.79′

CINCINNATI

650 B S4 FUEL 100LL, JET A OX 1, 2 NOTAM FILE DAY RWY 05-23: H6100X100 (ASPH) S-66, D-78, DT-140 MIRL

H-10G, L-27E

RWY 05: REIL. PAPI(P4L). Trees.

RWY 23: REIL. PAPI(P4L). Thid dsplcd 299'. Tree. Rgt tfc.

RWY 08-26: 3040X297 (TURF)

RWY 08: Thid dspicd 951'. Trees. RWY 26: Trees. Rgt tfc.

AIRPORT REMARKS: Attended 1300–2200Z‡. CAUTION: Ultralights enter/exit pattern at Rwy 08 to N lower than regular tfc pattern. Ultralights do not fly S of Rwy 26. Rwy 08–26 marked with white and black cones. ACTIVATE MIRL Rwy 05–23—CTAF.

WEATHER DATA SOURCES: AWOS-3 120.025 (513) 422-3505.

COMMUNICATIONS: CTAF/UNICOM 123.0

® DAYTON APP CON 126.5 (091°-180°) 118.85 127.225

**R**DAYTON DEP CON 126.5 (091°-180°)

DAYTON CLNC DEL 119.4 (937) 454-7282 RADIO AIDS TO NAVIGATION: NOTAM FILE FFO.

RICHMOND (L) VORTAC 110.6 RID Chan 43 N39°45.30′ W84°50.33′ 126° 24.5 NM to fld. 1135/3W.

HOOK FLD NDB (MHW) 239 HKF N39°29.93′ W84°26.85′ 054° 3.1 NM to fld. NOTAM FILE DAY. NDB OTS indef.

ONIDA NDB (LOM) 223 MW N39°34.70′ W84°19.41′ 235°4.4 NM to fld. Unmonitored. ILS 111.1 I–MWO Rwy 23 LOM ONIDA NDB. LOC only.

MIDWEST N39°25.78′ W83°48.07′ NOTAM FILE ILN.

CINCINNATI H-10g. L-27e

(T) VORW/DME 112.9 MXQ Chan 76 at Airborne Airpark. 1050/4W. Unmonitored when twr clsd.

VOR unusable 051°-224°. 170°-275°.

1011 411404510 001 221 111

MILLER (See ALLIANCE)

MILLER FARM LANDING STRIP (See BALTIMORE)

## **MILLERSBURG**

**HOLMES CO** (10G) 2 SW UTC-5(-4DT) N40°32.23′ W81°57.26′ 1218 B S4 **FUEL** 100LL, JET A OX 3 NOTAM FILE CLE

RWY 09-27: H3498X65 (ASPH) S-14, D-25 MIRL 1.0% up W.

RWY 09: REIL. Pole. RWY 27: REIL. VASI(V2L). Trees.

AIRPORT REMARKS: Attended Mon-Fri 1300-0100Z‡, Sat

1300–2300Z‡, Sun 1730–2300Z‡. Deer on and invof arpt.

ACTIVATE MIRL Rwy 09-27 and REIL Rwy 09 and Rwy 27-123.4.

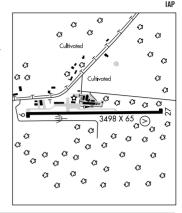
WEATHER DATA SOURCES: AWOS-3 128.325 (330) 674-6279.

COMMUNICATIONS: CTAF/UNICOM 123.0

R INDIANAPOLIS CENTER APP/DEP CON 124.45

RADIO AIDS TO NAVIGATION: NOTAM FILE CLE.

TIVERTON (L) VOR/DME 116.5 TVT Chan 112 N40°27.48′ W82°07.61′ 062° 9.2 NM to fld. 1340/3W.



MILLS (See MANTUA)

MONROE CO (See WOODSFIELD)

MORAINE AIR PARK (See DAYTON)

MORGAN CO (See McCONNELSVILLE)

MORROW CO (See MOUNT GILEAD)

1085 B S4 NOTAM FILE CLE

# **MOUNT GILEAD**

MORROW CO (419) 2 SW UTC-5(-4DT) N40°31.47′ W82°51.00′

DETROIT L-29A

L-29A IAP

DETROIT

L-29B

RWY 10-28: H3497X65 (ASPH) S-3 MIRL 0.3% up E

RWY 10: Trees. RWY 28: SAVASI(S2L)—GA 4.0° TCH 26'. Trees.

AIRPORT REMARKS: Attended Mon-Sat 1400-2300Z‡. Rwy 28 SAVASI OTS indef. ACTIVATE MIRL Rwy 10-28—CTAF.

(R) MANSFIELD APP/DEP CON 124.2 (1100-0400Z‡)

RCLEVELAND CENTER APP/DEP CON 134.9 (0400-1100Z‡)

RADIO AIDS TO NAVIGATION: NOTAM FILE MFD.

MANSFIELD (L) VORTAC 108.8 MFD Chan 25 N40°52.12′ W82°35.46′ 213° 23.8 NM to fid. 1210/3W. BUCKEYE (T) VORW 109.8 BUD N40°37.00′ W83°03.81′ 124° 11.2 NM to fid. NOTAM FILE MNN.

## MOUNT VERNON

**KNOX CO** (413) 4 SW UTC-5(-4DT) N40°19.74′ W82°31.57′

DETROIT

1191 B S4 **FUEL** 80, 100LL, JET A1+ TPA—1999(808) NOTAM FILE CLE

H-10G, L-29A

RWY 10-28: H5500X100 (ASPH) S-18, D-23 MIRL RWY 10: REIL. PAPI(P4L). Tree. RWY 28: REIL. PAPI(P4L).

AIRPORT REMARKS: Attended Nov-Mar Mon-Fri 1200-2300Z‡, Apr-Oct Mon-Fri 1200-0000Z‡, Sat 1400-2200Z‡,

Sun 1500–2200Z‡. For attendance other times call 24 hrs in advance 740–694–4687. Deer on and invof arpt. ACTIVATE MIRL Rwy 10–28—CTAF. Rwy 10 and Rwy 28 PAPI's opr continuously.

WEATHER DATA SOURCES: AWOS-3 126.05 (740) 397-6297.

COMMUNICATIONS: CTAF/UNICOM 123.05

APPLETON RCO 122.1R 116.7T (DAYTON RADIO)

R COLUMBUS APP/DEP CON 120.2 CLNC DEL 119.45

RADIO AIDS TO NAVIGATION: NOTAM FILE DAY.

WYNKOOP (6G4) 2 S UTC-5(-4DT) N40°21.90′ W82°29.74′ DETROIT

1041 B S2 FUEL 100LL NOTAM FILE CLE

RWY 06-24: 3355X90 (TURF) LIRL (NSTD)

RWY 06: Thid dspicd 43'. Trees. RWY 24: Thid dspicd 400'. Road.

RWY 09-27: 2600X65 (TURF-DIRT)

RWY 09: Brush. RWY 27: Road.

AIRPORT REMARKS: Attended Apr–Sep Mon–Sat 1300–2300Z‡, Oct–Mar Mon–Sat 1300–2100Z‡. Deer on and invof arpt. For rotating bon call 740–392–9125. Rwy 06–24 NSTD LIRL; one green thid lgt each side of thid; dsplcd thids not lgtd; 2617' of rwy lgtd. NSTD LIRL ops dusk–dawn Apr–Oct. Rwy 06–24 edges and dsplcd thids marked with white lgt fixtures with small white cones attached.

COMMUNICATIONS: CTAF 122.9

## MOUNT VICTORY

ELLIOTTS LANDING (074) 1 SE UTC-5(-4DT) N40°31.48′ W83°30.70′

DETROIT

1045 NOTAM FILE DAY **RWY 15–33:** 2750X110 (TURF)

DWV 15 Towns DWV

RWY 15: Trees. RWY 33: P-line.

AIRPORT REMARKS: Unattended. Rwy 15-33 marked with tires on each end.

COMMUNICATIONS: CTAF 122.9.

# NAPOLEON

HENRY CO (7W5) 3 E UTC-5(-4DT) N41°22.46′ W84°04.08′

DETROIT L-28J

IAP

683 B S2 **FUEL** 100LL, JET A NOTAM FILE CLE **RWY 10–28**: H3956X65 (ASPH) MIRL

RWY 10: SAVASI(S2L), Road. RWY 28: REIL, SAVASI(S2L), Trees.

AIRPORT REMARKS: Attended Apr-Sep 1300Z‡-dusk, Oct-Mar, Mon-Sat 1300-2230Z‡. Rwy 10 and Rwy 28 VASI OTS indef. Rwy 28 REIL OTS indef. ACTIVATE MIRL Rwy 10-28; REIL Rwy 28; SAVASI Rwy 10 and Rwy 28-CTAF.

COMMUNICATIONS: CTAF/UNICOM 123.0

R TOLEDO APP/DEP CON 134.35

RADIO AIDS TO NAVIGATION: NOTAM FILE CLE.

WATERVILLE (L) VOR/DME 113.1 VWV Chan 78 N41°27.09' W83°38.32' 259° 19.9 NM to fld. 660/2W.

#### NEIL ARMSTRONG (See WAPAKONETA)

**NEWARK** N40°01.56′ W82°27.81′ NOTAM FILE DAY.

NDB (MHW) 524 HEH at Newark-Heath.

DETROIT L-29A

**NEWARK-HEATH** (VTA) 3 SW UTC-5(-4DT) N40°01.48′ W82°27.71′

884 B S4 **FUEL** 100LL, JET A1+ OX 1, 2 TPA—1900(1016) NOTAM FILE VTA **RWY 09-27**: H4649X75 (ASPH) S-30 LIRL 0.3% up W

DETROIT L-29A

**RWY 09:** REIL. PAPI(P4L)—GA 3.25° TCH 27'. Thid dspicd 455'. Road.

RWY 27: REIL, PAPI(P4R)—GA 3.25° TCH 20', Fence.

AIRPORT REMARKS: Attended Apr-Oct 1230-0030Z‡, Nov-Mar 1230‡-dark. Fuel avbl 1230Z‡-dark. Deer occasionally on or near rwy. Rwy 09 and 27 REILS OTS indef. MIRL Rwy 09-27 and REIL Rwys 09 and 27 operates low intensity continuously to increase intensity—123.3.

WEATHER DATA SOURCES: ASOS 121.125 (740) 522-1066.

COMMUNICATIONS: CTAF/UNICOM 122.7

APPLETON RCO 122.1R 116.7T (DAYTON RADIO)

R COLUMBUS APP/DEP CON 120.2 CLNC DEL 124.85

RADIO AIDS TO NAVIGATION: NOTAM FILE DAY.

APPLETON (H) VORTAC 116.7 APE Chan 114 N40°09.06′ W82°35.30′ 148° 9.6 NM to fld. 1350/6W.

NDB (MHW) 524 HEH N40°01.56′ W82°27.81′ at fld.

ILS 110.9 RXK Rwy 09. LOC only.

# NEWCOMERSTOWN N40°13.75′ W81°28.59′ NOTAM FILE CLE.

DETROIT H-10G. L-29B

(L) VOR/OME 111.8 CTW Chan 55 017° 14.7 NM to Harry Clever Fld. 1180/7W. HIWAS. Unusable 015°-030°; 090°-100° byd 30 NM; 051°-066°; 011°-120° byd 30 NM blo 3300′.

RCO 122.1R 111.8T (CLEVELAND RADIO)

## **NEW LEXINGTON**

PERRY CO (I86) 2 S UTC-5(-4DT) N39°41.50′ W82°11.87′

1051 B S2 FUEL 100LL NOTAM FILE CLE

CINCINNATI L-29B

**RWY 08–26**: H3498X75 (ASPH) MIRL 0.3% up SW

RWY 08: Fence. RWY 26: REIL. Trees.

IAP

AIRPORT REMARKS: Attended Mon–Sat 1300–2100Z‡. For fuel after hrs call 740–605–1966. For after hrs call ahead for svc 740–343–0933. Rwy 08–26 has 3" to 4" wide cracks at various locations. Rwy 26 REIL OTS indef. ACTIVATE MIRL 08–26 and REIL Rwy 26–122.8. Deer and turkey on and invof arpt.

COMMUNICATIONS: CTAF/UNICOM 122.8

R INDIANAPOLIS CENTER APP/DEP CON 124.45

RADIO AIDS TO NAVIGATION: NOTAM FILE ZZV.

ZANESVILLE (L) VOR/DME 111.4 ZZV Chan 51 N39°56.45′ W81°53.56′ 229° 20.6 NM to fld. 900/6W.

## **NEW PHILADELPHIA**

HARRY CLEVER FLD (PHD) 3 SE UTC-5(-4DT) N40°28.21′ W81°25.20′

DETROIT L-29B

894 B S4 **FUEL** 100LL, JET A+ NOTAM FILE PHD **RWY 14–32**: H3951X100 (ASPH) S–52.5, D–67.5, DT–140 MIRL

RWY 14: REIL. PAPI(P4R)—GA 4.0° TCH 30'. Thid dsplcd 330'. Trees.

RWY 32: REIL. PAPI(P4L)—GA 4.0° TCH 54'. Road.

RWY 11-29: 1907X70 (TURF)

RWY 11: Trees. RWY 29: Trees.

AIRPORT REMARKS: Attended Apr-Sep 1300-0100Z‡, Oct-Mar 1300-2200Z‡. Two 919' unlighted twrs 180' NE of Rwy 14-32. ACTIVATE MIRL Rwy 14-32—123.3.

WEATHER DATA SOURCES: ASOS 121.425 (330) 339-1125.

COMMUNICATIONS: CTAF/UNICOM 122.8

BRIGGS RCO 122.1R 112.4T (CLEVELAND RADIO)

® AKRON-CANTON APP/DEP CON 125.5 (1100-0500Z‡)

® CLEVELAND CENTER APP/DEP CON 134.9 (0500-1100Z‡)

RADIO AIDS TO NAVIGATION: NOTAM FILE CLE.

BRIGGS (L) VOR/DME 112.4 BSV Chan 71 N40°44.44′ W81°25.93′ 182° 16.2 NM to fld. 1230/4W. NEWCOMERSTOWN (L) VOR/DME 111.8 CTW Chan 55 N40°13.75′ W81°28.59′ 017° 14.7 NM to fld. 1180/7W. HIWAS.

#### **NEWTON FALLS**

BRACEVILLE (41N) 2 N UTC-5(-4DT) N41°12.67′ W80°58.16′

DETROIT

L-30G

900 NOTAM FILE CLE RWY 01-19: H3000X30 (ASPH)

RWY 01: Thid dsplcd 55'. Bldg. RWY 19: Trees.

AIRPORT REMARKS: Attended irregularly. COMMUNICATIONS: CTAF/UNICOM 122.8

RADIO AIDS TO NAVIGATION: NOTAM FILE CAK.

AKRON (L) VOR/DME 114.4 ACO Chan 91 N41°06.48' W81°12.09' 63° 12.2 NM to fld. 1200/4W.

#### NOBLE CO (See CALDWELL)

NORTH BASS ISLAND (3X5) Ø NW UTC-5(-4DT) N41°43.08' W82°49.27'

DETROIT

594 NOTAM FILE CLE RWY 08-26: 1900X150 (TURF)

RWY 01-19: H1804X60 (ASPH)

RWY 01: Tree. RWY 19: Trees. Rgt tfc.

AIRPORT REMARKS: Unattended. Rwy 08–26 CLOSED indef. No touch and go landings and no student training. No ops dusk-dawn.

COMMUNICATIONS: CTAF/UNICOM 122.8

NORWALK-HURON CO (5A1) 3 E UTC-5(-4DT) N41°14.69′ W82°33.07′ DETROIT 852 B FUEL 100LL, JET A NOTAM FILE CLE L-30F ΙΔΡ RWY 10-28: H4210X75 (ASPH) MIRL 0.4% up W RWY 10: Thid dspicd 240'. Trees. RWY 28: Thid dspicd 668'. Road. 0 Œ AIRPORT REMARKS: Attended Mon-Sat 1400-2200Z‡, Sun €3 Œ 1800-2300Z‡. ACTIVATE MIRL Rwy 10-28-CTAF. Drag strip on E €3 end of rwy. 63 3 COMMUNICATIONS: CTAF/UNICOM 122.8 <u>ت</u> ت R MANSFIELD APP/DEP CON 124.2 (1100-0400Z‡) **3** 3 R CLEVELAND CENTER APP/DEP CON 127.9. (0400-1100Z‡) RADIO AIDS TO NAVIGATION: NOTAM FILE CLE. **43** SANDUSKY (L) VOR/DME 109.2 SKY Chan 29 N41°26.07' W82°39.29' 162° 12.3 NM to fld. 580/4W. €3 €3 a a €3 €3 Œ €3 ß Drag Strip OHIO DUSTING CO INC (See PANDORA) OHIO UNIVERSITY SNYDER FLD (See ATHENS-ALBANY) OHIO STATE UNIVERSITY (See COLUMBUS) OLD PORTAGE HELIPORT (See AKRON) ONIDA N39°34.70′ W84°19.41′ NOTAM FILE MGY. CINCINNATI NDB (LOM) 223 MW 234° 4.4 NM to Middletown Rgnl/Hook Fld. Unmonitored. **OTTAWA** PUTNAM CO (OWX) 3 NE UTC-5(-4DT) N41°02.14′ W83°58.92′ DETROIT B S2 FUEL 100LL, JET A NOTAM FILE CLE L-28J RWY 09-27: H4427X65 (ASPH) HIRL ΙΔΡ RWY 09: REIL. Road. RWY 27: REIL. PAPI(P2L), P-line. AIRPORT REMARKS: Attended Mon-Fri 1400-2200Z‡. For svcs after hrs call 419-456-3410. Parachute Jumping. Extensive glider ops. Intensive agricultural ops and crop dusting. PAEW invof ramp indef. Windsock OTS indef. Rwy 09 REIL OTS indef. ACTIVATE HIRL Rwy 09-27 and REIL Rwy 09 and Rwy 27-CTAF. WEATHER DATA SOURCES: AWOS-3 120,525 (419) 523-4151. COMMUNICATIONS: CTAF/UNICOM 122.7 (R) TOLEDO APP/DEP CON 120.8 RADIO AIDS TO NAVIGATION: NOTAM FILE FDY. FINDLAY (L) VORTAC 108.2 FDY Chan 19 N40°57.32′ W83°45.36′ 297° 11.3 NM to fld. 820/2W. **OXFORD** N39°30.45′ W84°46.84′ NOTAM FILE DAY CINCINNATI NDB (MHW) 282 OXD at Miami University. NDB unmonitored. L-27E OXFORD MIAMI UNIVERSITY (OXD) 2 W UTC-5(-4DT) N39°30.14′ W84°47.06′ CINCINNATI 1041 B FUEL 100LL. JET A1+ NOTAM FILE DAY L-27E RWY 05-23: H4011X70 (ASPH-GRVD) S-34, D-50 LIRL (NSTD) ΙΔΡ RWY 05: REIL. PAPI(P2L)—GA 3.0° TCH 26'. Thid dsplcd 270'. Road. RWY 23: REIL. PAPI(P2L)-GA 3.0° TCH 28'. Trees. AIRPORT REMARKS: Attended Mon-Fri 1200-2300Z‡, Sat-Sun 1400-2200Z‡, holidays irregularly. Rwy 05 NSTD dsplcd thid lgts 190' from thid. PAEW 40' N of Rwy 05-23. NSTD MIRL Rwy 05-23 preset on low ints dusk-0200Z‡; to increase ints and ACTIVATE REIL Rwy 05 and Rwy 23-122.9; after 0200Z‡ ACTIVATE NSTD

RICHMOND (L) VORTAC 110.6 RID Chan 43 N39°45.30′ W84°50.33′ 173° 15.4 NM to fld. 1135/3W. OXFORD NDB (MHW) 282 OXD N39°30.45′ W84°46.84′ at fld. NOTAM FILE DAY. NDB unmonitored.

MIRL Rwy 05-23 and REIL Rwy 05 and Rwy 23-122.9.

COMMUNICATIONS: CTAF/UNICOM 122.8

R CINCINNATI APP/DEP CON 121.0

RADIO AIDS TO NAVIGATION: NOTAM FILE HUF.

PACKER (See RADNOR)

## **PAINESVILLE**

CONCORD AIRPARK (2G1) 3 SE UTC-5(-4DT) N41°40.02′ W81°11.83′

DETROIT

999 FUEL 100LL NOTAM FILE CLE

L-30G

RWY 02-20: H2181X38 (ASPH) S-12.5 LIRL 1.2% up SW.

RWY 02: Trees. RWY 20: Brush.

AIRPORT REMARKS: Attended irregularly. Birds on and invof arpt. For local traffic only, for rwy lgts call 440–352–3228. Rwy 02–20 numbers small.

COMMUNICATIONS: CTAF/UNICOM 122.8

CHARDON RCO 122.1R 112.7T (CLEVELAND RADIO)

R CLEVELAND APP/DEP CON 125.35

RADIO AIDS TO NAVIGATION: NOTAM FILE CLE.

 $\textbf{CHARDON (H) VOR/DME} \ 112.7 \qquad \text{CXR} \qquad \text{Chan} \ 74 \qquad \text{N41}^{\circ} 31.02' \ \text{W81}^{\circ} 09.79' \qquad 355^{\circ} \ 9.1 \ \text{NM to fid.} \ 1310/5 \text{W}.$ 

COMM/NAV/WEATHER REMARKS: For IFR clearance ctc Cleveland apch control at 216-898-2040.

#### **PANDORA**

**OHIO DUSTING CO INC** (6C2) 1 NW UTC-5(-4DT) N40°57.15′ W83°58.93′

DETROIT

765 S2 FUEL 100LL NOTAM FILE CLE

RWY 09-27: 3112X150 (TURF) RWY 09: Thid dspicd 720'. Trees.

RWY 27: Thid dsplcd 490'. P-line.

AIRPORT REMARKS: Attended continuously. Rwy 27 p-line marked with orange balls. Rwy 09 and Rwy 27 dsplcd thld marked with reflective panels.

COMMUNICATIONS: CTAF 122.9

PARR (See ZANESVILLE)

PARSONS (See CARROLLTON)

PATTERSON N39°49.14′ W84°03.33′ NOTAM FILE FFO.

CINCINNATI

(T) TACAN Chan 99 FFO (115.2) at Wright Patterson AFB. 804/4W.

L-27E

TACAN azimuth unusable:

295°-360° byd 10 NM blo 5,000′.

**PAULDING AIRPORT INC** (2H8) 2 NE UTC-5(-4DT) N41°10.09′ W84°33.41′

DETROIT

721 S4 OX 4 TPA—1500(779) NOTAM FILE CLE

RWY 18-36: 2861X80 (TURF) LIRL (NSTD)

RWY 36: Building

AIRPORT REMARKS: Attended Mon-Fri 1300-2200Z‡. Arpt CLOSED indef. ACTIVATE LIRL Rwy 18-36—122.9. Rwy 18-36 NSTD LIRL; thid lgts incorrect color.

COMMUNICATIONS: CTAF 122.9

PERRY CO (See NEW LEXINGTON)

PHILLIPSBURG (317) O N UTC-5(-4DT) N39°54.80′ W84°24.03′

CINCINNATI

1031 B S4 FUEL 100LL NOTAM FILE DAY

L-27E

RWY 03-21: H3000X40 (ASPH) LIRL RWY 03: REIL. Thid dsplcd 130'. Tree.

RWY 21: REIL. Trees.

AIRPORT REMARKS: Attended 1400–2300Z‡. Arpt CLOSED to helicopter training. Do not fly over school 2100′ S of arpt in line with rwy. Rwy 03–21 2416′ lgtd between dsplcd thlds only.

COMMUNICATIONS: CTAF/UNICOM 122.7

R DAYTON APP CON 134.45 (181°-359°)

RADIO AIDS TO NAVIGATION: NOTAM FILE DAY.

(R) DAYTON DEP CON 134.45 (181°-359°) 118.0

**DAYTON (L) VOR/DME** 114.5 DQN Chan 92 N40°00.99′ W84°23.81′ 183° 6.2 NM to fld. 990/1W. HIWAS.

PICKAWAY CO MEM (See CIRCLEVILLE)

PICKL N39°52.86′ W82°50.17′. NOTAM FILE LCK.

CINCINNATI

NDB (LOM) 376 LC 231° 5.9 NM to Rickenbacker Intl.

PIKE CO (See WAVERLY)

PIQUA AIRPORT-HARTZELL FLD (I17) 3 NW UTC-5(-4DT) N40°09.88′ W84°18.51′ DETROIT 994 B FUEL 100LL, JET A1+ NOTAM FILE DAY 1-27F ΙΔΡ RWY 08-26: H3997X75 (ASPH) S-30, D-36 MIRL RWY 26: REIL. Tree. RWY 08: RFII Tree AIRPORT REMARKS: Attended 1300-2200Z‡. Fuel avbl 24 hrs—credit card. Propeller repairs avbl. Aerobatic box lctd within 1 NM radius of arpt surface to 4500' MSL SR-SS. ACTIVATE MIRL Rwy 08-26 and REIL Rwy 08 and Rwy COMMUNICATIONS: CTAF/UNICOM 123.0 ROSEWOOD RCO 122.1R, 117.5T (DAYTON RADIO) R DAYTON APP/DEP CON 118.425 (360°-090°) 134.45 (181°-359°) RADIO AIDS TO NAVIGATION: NOTAM FILE DAY. DAYTON (L) VOR/DME 114.5 DON Chan 92 N40°00.99' W84°23.81' 026° 9.8 NM to fld. 990/1W. HIWAS. ROSEWOOD (H) VORTAC 117.5 ROD Chan 122 N40°17.27′ W84°02.59′ 244° 14.3 NM to fld. 1080/5W. PORTAGE CO (See RAVENNA) PORT BUCYRUS-CRAWFORD CO (See BUCYRUS) PORT CLINTON N41°31.12′ W82°52.12′ NOTAM FILE CLE. DETROIT NDB (MHW) 423 PCW at Carl R Keller Fld. L-30F PORT CLINTON CARL R KELLER FLD (PCW) 3 E UTC-5(-4DT) N41°30.98′ W82°52.17′ DETROIT 590 B FUEL 100LL, JET A NOTAM FILE CLE H-10G, L-30F RWY 09-27: H5646X100 (ASPH) S-16, IAP MIRI RWY 09: REIL. PAPI(P4L)—GA 3.5° TCH 31'. Trees. RWY 27: REIL. PAPI(P4L)—GA 4° TCH 28'. Thid dsplcd 201'. Trees. RWY 18-36: H4001X75 (ASPH) MIRL RWY 36: Road. RWY 18: Trees AIRPORT REMARKS: Attended 1300-2300Z‡. ACTIVATE MIRL Rwy 09-27 and Rwy 18-36; REIL Rwy 09 and Rwy 27; PAPI Rwy 09 and Rwy 27-CTAF. WEATHER DATA SOURCES: AWOS-3 118.775 (419) 734-9955 COMMUNICATIONS: CTAF/UNICOM 122.8 SANDUSKY RCO 122.1R 109.2T (CLEVELAND RADIO) CLEVELAND APP/DEP CON 126.35 RADIO AIDS TO NAVIGATION: NOTAM FILE CLE. SANDUSKY (L) VOR/DME 109.2 SKY Chan 29 N41°26.07' W82°39.29' 301° 10.9 NM to fld. 580/4W. PORT CLINTON NDB (MHW) 423 PCW N41°31.12′ W82°52.12′ at fld. COMM/NAV/WEATHER REMARKS: AWOS-3 ceiling unreliable. PORT COLUMBUS INTL (See COLUMBUS) PORTSMOUTH N38°46.91′ W82°50.67′ NOTAM FILE DAY. CINCINNATI NDB (MHW) 373 PMH 002° 3.5 NM to Greater Portsmouth Rgnl. VFR only. L-22E

## **PORTSMOUTH**

GREATER PORTSMOUTH RGNL (PMH) 10 NE UTC-5(-4DT)

N38°50.43' W82°50.84'

663 B S4 FUEL 100LL, JET A1+ NOTAM FILE DAY

RWY 18-36: H5001X100 (ASPH) S-30, D-42, DT-70 MIRL

RWY 18: REIL. PAPI(P4L) TCH 26'. Trees. Rgt tfc.

RWY 36: REIL. PAPI(P4L) TCH 31'. Tree.

AIRPORT REMARKS: Attended Apr-Dec 1300-0100Z‡, Jan-Mar 1300-0000Z‡, Hill obstruction lgts 460' aby arpt (1124' MSL) 1 mile S and 410' abv arpt (1074' MSL) 1/2 mile NW. Acft not visible from one rwy end to another or no line of sight between rwy ends. Rwy 36 REIL OTS indef. Ldg fee for commercial acft waived with fuel purchase. ACTIVATE MIRL Rwy 18-36; REIL Rwys 18 and 36-CTAF

WEATHER DATA SOURCES: AWOS-3 125,175 (740) 820-2500.

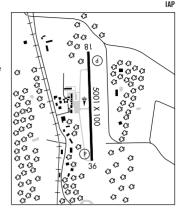
COMMUNICATIONS: CTAF/UNICOM 122.8

R HUNTINGTON APP/DEP CON 128.4

RADIO AIDS TO NAVIGATION: NOTAM FILE LOU.

YORK (L) VORTAC 112.8 YRK Chan 75 N38°38.65" W82°58.70' 033° 13.3 NM to fld. 1040/5W.

PORTSMOUTH NDB (MHW) 373 PMH N38°46.91′ W82°50.67′ 002° 3.5 NM to fld. NOTAM FILE DAY. VFR only.



PUT IN BAY (3W2) 1 SW UTC-5(-4DT) N41°38.20′ W82°49.70′

DETROIT

CINCINNATI

H-10G. L-26H

NOTAM FILE CLE

RWY 03-21: H2870X75 (ASPH)

RWY 03: Thid dsplcd 452', Trees, Rgt tfc. RWY 21: Thid dspicd 657', Trees.

AIRPORT REMARKS: Attended May-Sept 1300-0100Z‡, Oct-Apr 1230-2230Z‡. Acft ops prohibited dusk-dawn. Expect moderate turbulence on departure and approach when wind exceeds 10 knots. Acft Indg Rwy 21 or departing Rwy 03 stay 1000' clear of Perry's Monument 352' AGL/942' MSL 1½ miles NE of arpt. No touch and go Idg; no student training. Parking/ramp fees are collected for all private or commercial acft. All pilots are required to check into the arpt office at the time of arrival. No tiedown ropes provided; please bring your own set, All acft are required to shut down engine(s) prior to enplaning/deplaning passengers.

COMMUNICATIONS: CTAF/UNICOM 122 8

PUTNAM CO (See OTTAWA)

## RADNOR

PACKER (5E9) 3 NW UTC-5(-4DT) N40°24.48′ W83°13.16′

918 S4 FUEL 100LL TPA-1818(900) NOTAM FILE DAY

RWY 119-27: 3470X90 (TURE)

RWY 09: Thid dspicd 120'. Road. RWY 27. Trees

AIRPORT REMARKS: Attended continuously. Rwy 09-27 marked by cones.

**COMMUNICATIONS: CTAF 122.9** 

#### RAVENNA

PORTAGE CO (29G) 3 N UTC-5(-4DT) N41°12.61′ W81°15.10′

DETROIT

DETROIT

L-30G IAP

RWY 09-27: H3500X75 (ASPH) MIRL

1197 B FUEL 100LL, JET A NOTAM FILE CLE RWY 09: REIL. Trees. RWY 27: REIL. PAPI(P4L).

AIRPORT REMARKS: Attended 1300Z‡-dusk. 24 hr self svc fuel. Paraglider ops by permit only. Deer on and invof arpt. All areas off rwy surface soft when wet or thawing. ACTIVATE MIRL Rwy 09-27; REIL Rwy 09 and Rwy 27 and PAPI Rwy 27-CTAF.

COMMUNICATIONS: CTAF/UNICOM 123.05

AKRON RCO 122.1R, 114.4T (CLEVELAND RADIO)

- (R) AKRON-CANTON APP/DEP CON 118.6 (1100-0500Z‡) CLNC DEL 125.65
- R CLEVELAND CENTER APP/DEP CON 120.775 (0500-1100Z‡)

RADIO AIDS TO NAVIGATION: NOTAM FILE CAK.

AKRON (L) VOR/DME 114.4 ACO Chan 91 N41°06.47′ W81°12.09′ 344° 6.5 NM to fld. 1194/4W.

READER-BOTSFORD (See WELLINGTON)

RED STEWART AIRFIELD (See WAYNESVILLE)

RICHARD DOWNING (See COSHOCTON)

RICKENBACKER INTL (See COLUMBUS) **ROSEWOOD** N40°17.27′ W84°02.59′ NOTAM FILE DAY. DETROIT (H) VORTAC 117.5 ROD Chan 122 246° 5.7 NM to Sidney Muni, 1080/5W. H-10G. L-27E RCO 122.1R 117.5T (DAYTON RADIO) ROSS CO (See CHILLICOTHE) RUHE'S (See LEIPSIC) RUSHSYLVANIA N40°27.54′ W83°40.08′ NOTAM FILE DAY. DETROIT NDB (MHW) 326 RUV 233° 4.2 NM to Bellefontaine Rgnl, SHUTDOWN. L-27E ST CLAIRSVILLE ALDERMAN (2P7) 3 W UTC-5(-4DT) N40°03.41′ W80°57.79′ DETROIT 1187 B NOTAM FILE CLE 1-29B RWY 01-19: H2843X50 (ASPH) LIRL 0.8% up N. IAP RWY 01. Trees RWY 19. Trees AIRPORT REMARKS: Attended 1300Z‡—dusk. Rwy 01-19 surface has med block cracking throughout. South half of ramp - poor condition - broken pavement. Call ahead to ACTIVATE rotating bcn and LIRL Rwy 01-19-740-695-0908. Ldg fee. **COMMUNICATIONS: CTAF 122.9** BELLAIRE RCO 122.1R 117.1T (CLEVELAND RADIO) (R) CLEVELAND CENTER APP/DEP CON 120.4 RADIO AIDS TO NAVIGATION: NOTAM FILE CLE. BELLAIRE (H) VOR/DME 117.1 AIR Chan 118 N40°01.02′ W80°49.04′ 297° 7.1 NM to fld. 1290/7W. ST MARYS GRAND LAKE ST MARYS SPB (012) 5 NE UTC-5(-4DT) N40°32.46′ W84°29.44′ DETROIT 871 NOTAM FILE DAY WATERWAY 09-27: 7000X4000 (WATER) WATERWAY 09: Buoy. WATERWAY 27: Buoy. Rgt tfc. SEAPLANE REMARKS: Attended Apr-Nov 1300-2200Z±, Arpt CLOSED Nov 15 thru Apr 1 and Memorial and Labor day. No ngt ldgs. No public docks; PPR req for private dock tie up; call 419-394-8797. COMMUNICATIONS: CTAF 122 9 COMM/NAV/WEATHER REMARKS: Acft operating at Seaplane Base should monitor 122.8 for tfc at Celina Lakefld and Neil Armstrong Wapakoneta Arpts. SALEM KOONS (8G8) 2 SW UTC-5(-4DT) N40°53.00′ W80°52.99′ DETROIT NOTAM FILE CLE RWY 09-27: 1850X100 (TURF) RWY 09: P-line. RWY 27: Trees. Rgt tfc. AIRPORT REMARKS: Attended dalgt hrs. Ldg fee. COMMUNICATIONS: CTAF 122 9 **SALEM AIRPARK INC** (38D) 3 N UTC-5(-4DT) N40°56.89′ W80°51.73′ DETROIT 1162 B S4 FUEL 100LL NOTAM FILE CLE 1-30G RWY 10L-28R: H3404X50 (ASPH) LIRL (NSTD) 0.3% up E IAP RWY 28R: Thid dspicd 258'. Trees. RWY 101 · Trees RWY 10R-28L: 2593X85 (TURF) 0.4% up E RWY 10R: Trees. RWY 28L: Pole. AIRPORT REMARKS: Attended 1400Z‡-dusk. CAUTION: P-line crosses apch end of Rwys 28L and 28R at thld. CAUTION: Drag Strip 3500' SE of arpt. Arpt bcn ops dusk-0430Z‡. Arpt lgts ops dusk-0500Z‡. ACTIVATE LIRL Rwy 10L-28R—CTAF. For rotating bcn after 0430Z‡ call airport manager before dusk on 330-533-1060. Rwy 10L-28R NSTD LIRL; Rwy 28R Igtd 330' from rwy end with 360° green Igts; Rwy 10L Igtd 238' from rwy end . Rwy 10R-28L marked with yellow cones on N side of rwy; rwy ends not marked. COMMUNICATIONS: CTAF/UNICOM 122.7 AKRON-CANTON APP/DEP CON 125.5 (1100-0500Z‡) (0500-1100Z‡) RADIO AIDS TO NAVIGATION: NOTAM FILE YNG. YOUNGSTOWN (L) VORTAC 109.0 YNG Chan 27 N41°19.86' W80°40.48' 205° 24.5 NM to fld. 1160/5W. HIWAS. SALT FORK LODGE HELIPORT (See CAMBRIDGE)

**SANDUSKY** N41°26.07′ W82°39.29′ NOTAM FILE CLE. DETROIT (L) VOR/DME 109.2 SKY Chan 29 at Griffing-Sandusky. 580/4W. H-10G, L-30F

SANDUSKY CO RGNL (See FREMONT)

## SANDUSKY

GRIFFING-SANDUSKY (SKY) 3 SE UTC-5(-4DT) N41°26.00′ W82°39.14′

DETROIT 1-30E IAP

580 B S4 FUEL 100LL. JET A AOE NOTAM FILE CLE RWY 09-27: H3559X60 (ASPH) S-9 LIRL

RWY 27: PAPI(P4L). Tree.

RWY 09: REIL. Thid dspicd 183'. Road.

RWY 18-36: H2593X40 (ASPH) LIRL

RWY 36: Thid dspicd 405'. Road.

AIRPORT REMARKS: Attended 1300-0000Z‡. Arpt CLOSED Christmas day. Waterfowl bird hazard adjacent to arpt. Deer on and invof arpt. Ldg fee. Flight Notification Service (ADCUS) available.

COMMUNICATIONS: CTAF/UNICOM 123.0

SANDUSKY RCO 122.1R 109.2T (CLEVELAND RADIO)

CLEVELAND APP/DEP CON 126 35

RADIO AIDS TO NAVIGATION: NOTAM FILE CLE.

SANDUSKY (L) VOR/DME 109.2 SKY Chan 29 N41°26.07' W82°39.29' at fld. 580/4W.

SCHMELTZER HELIPORT (See AKRON)

SEAGATE HELISTOP (See TOLEDO)

## **SFBRING**

TRI-CITY (3G6) 1 SE UTC-5(-4DT) N40°54.36′ W81°00.00′

DETROIT L-29B IAP

1188 FUEL 100LL NOTAM FILE CLE RWY 17-35: H2768X45 (ASPH) MIRL (NSTD)

RWY 35: Tree

AIRPORT REMARKS: Attended 1400Z‡-dusk. 100LL fuel avbl 24 hrs with credit card. ACTIVATE MIRL Rwy 17-35-CTAF. Rwy 17-35 NSTD MIRL; thid lgtd with 2 blue/red lgts each side.

**COMMUNICATIONS: CTAF 122.9** 

AKRON RCO 122.1R 114.4T (CLEVELAND RADIO)

- (R) AKRON-CANTON APP/DEP CON 125.5 (1100-0500Z±)
- R CLEVELAND CENTER APP/DEP CON 120.775 (0500-1100Z‡)

RADIO AIDS TO NAVIGATION: NOTAM FILE CAK.

AKRON (L) VOR/DME 114.4 ACO Chan 91 N41°06.47′ W81°12.09′ 147° 15.2 NM to fld. 1194/4W.

SENECA CO (See TIFFIN)

SHELBY COMMUNITY (12G) 2 W UTC-5(-4DT) N40°52.39′ W82°41.84′

DETROIT L-29A

1120 B S4 NOTAM FILE CLE RWY 18-36: H3174X50 (ASPH) S-5 LIRL (NSTD)

RWY 18: Road. RWY 36: P-line.

RWY 03-21: 1890X125 (TURF)

RWY 03: Tree. RWY 21: Road.

AIRPORT REMARKS: Attended 1100-2200Z±. Rwv 18-36 NSTD LIRL:

Rwy 18 thld lgts 220' from rwy end.

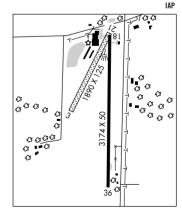
COMMUNICATIONS: CTAF/UNICOM 122.8

(R) MANSFIELD APP/DEP CON 124.2 (1100-0400Z‡)

CLEVELAND CENTER APP/DEP CON 134.9 (0400-1100Z‡)

RADIO AIDS TO NAVIGATION: NOTAM FILE MFD.

MANSFIELD (L) VORTAC 108.8 MFD Chan 25 N40°52.12' W82°35.46' 276° 4.9 NM to fld. 1210/3W



**SIDNEY MUNI** (I12) 3 S UTC-5(-4DT) N40°14.49′ W84°09.05′ DETROIT 1044 B S2 FUEL 100LL, JET A TPA-1844(800) NOTAM FILE DAY L-27E RWY 10-28: H4785X75 (ASPH) MIRL IAP RWY 10: PAPI(P2L). Thid dspicd 480'. Trees. RWY 28: REIL. PAPI(P2R)—GA 3.0° TCH 40'. Road. RWY 05-23: H2981X50 (ASPH) RWY 05: Road. RWY 23: P-line. AIRPORT REMARKS: Attended 1300-2300Z‡, ACTIVATE MIRL Rwy 10-28, and REIL Rwy 28—CTAF. WEATHER DATA SOURCES: AWOS-3 120.425 (937) 492-3683. COMMUNICATIONS: CTAF/UNICOM 123.05 ROSEWOOD RCO 122.1R 117.5T (DAYTON RADIO) **R** DAYTON APP/DEP CON 118.425 (360°-090°) RADIO AIDS TO NAVIGATION: NOTAM FILE DAY.

**ROSEWOOD (H) VORTAC** 117.5 ROD Chan 122 N40°17.27′ W84°02.59′ 246° 5.7 NM to fld. 1080/5W.

\$PORTYS N39°04.06′ W84°12.92′ NOTAM FILE DAY.

NDB (MHW) 245 PWF at Clermont Co. NDB unusable byd 15 NM.

CINCINNATI L-27E

Class IV. ARFF Index A

**SPRINGFIELD-BECKLEY MUNI** (SGH)(KSGH) CIV/MIL/ANG 5 S UTC-5(-4DT)

N39°50.42′ W83°50.41′

1051 B S4 FUEL 100LL, JET A TPA—See Remarks

CINCINNATI H-10g, L-27e IAP, DIAP, AD

RWY 06-24: H9009X150 (ASPH-CONC-GRVD) S-50, D-60 PCN 60 R/B/W/T HIRL

RWY 06: REIL. PAPI(P4L)—GA 3.0° TCH 43'. Trees.

RWY 24: ALSF2. PAPI(P4L)—GA 3.0° TCH 54'. Tree.

RWY 15-33: H5499X100 (ASPH) S-12 MIRL

RWY 15: REIL. PAPI(P4L)—GA 3.0° TCH 36'. Trees.

RWY 33: REIL. PAPI(P4L) TCH 36'. Trees.

#### RUNWAY DECLARED DISTANCE INFORMATION

 RWY 06:
 TORA-9009
 TODA-9009
 ASDA-9009
 LDA-9009

 RWY 15:
 TORA-5499
 TODA-5499
 ASDA-5499
 LDA-5499

 RWY 24:
 TORA-9009
 TODA-9009
 ASDA-9009
 LDA-9009

 RWY 33:
 TORA-5499
 TODA-5499
 ASDA-5499
 LDA-5499

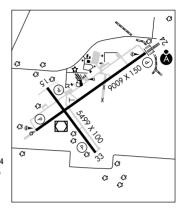
 ARRESTING GEAR/SYSTEM

RWY 06 ← HOOK E5 (35' OVRN) BAK-14 BAK-12A(B) (943') BAK-14 BAK-12A(B) (991') HOOK E5 (35' OVRN) → RWY 24

MILITARY SERVICE: A-GEAR Cable raised by BAK-14 device on request to twr. BAK-12A(B) avbl Tue-Fri 1230-2200Z‡, may be extended, other times by NOTAM for mil flying. Rwy 06-24 E-5 chain in overrun, departure engagement only.

JASU 6(AM32A-60B) FUEL J8(MiI) (NC 100LL, A)

FLUID PRESAIR LPOX LOX OIL 0-133-148-156(Mil) SOAP



AIRPORT REMARKS: Attended 1200–2300Z‡. Deer on and invof arpt. Heavy bird activity fall and winter months. Caution: Bird watch cond phase I (Dec–Jun) indicates light bird activity. Phase II (Jul–Nov) indicates heavy activity normally associated with migratory season. During twr operating hours Rwy 24 is the preferred rwy, wind 10 knots or less. Rwy 06–24 arresting device may be up when twr clsd. Rwys 06 and 24 acft arresting device BAK 12 located 35' beyond apch end Rwys 06 and 24. Closed to scheduled air carrier ops with greater than 9 passenger seats and unscheduled air carrier ops greater than 30 passenger seats. 90–day PPR, call arpt manager 937–325–6108. Rwy 15–33 limited to 25,000 lbs single wheel load capacity or less. Noise Abatement: Avoid over flying Yellow Springs 2 NM SW blo 4000', practice circling instrument approach not authorized blo 2000' establish on final. Avoid overflying ANG ramp. When twr clsd ACTIVATE ALSF2 Rwy 24, MIRL Rwy 15–33; REIL Rwy 06, Rwy 15 and Rwy 33—CTAF. HIRL Rwy 06–24 preset on med ints to increase ints ACTIVATE—CTAF. Rwy 15–33 and Twy F not avbl for air carrier ops. Rwy 06–24 980' concrete NE end, 1200' concrete SW end. TPA 2100 (1049), overhead 2600 (1549).

MILITARY REMARKS: See FLIP AP/1 Supplementary Arpt Remarks. RSTD Mil practice instrument apch not authorized when twr clsd. CAUTION A-gear Rwy 06–24 may be up when twr clsd. MISC Military practice instrument approach not authorized when twr closed. Wx obsn-Rwy 06 apch end not visible from the official point of obsn. Visibility is ltd from SW to NW. ANG PPR at all times DSN 346–2319, C937–327–2319. Runway Condition Reading not avbl. All tran acft ctc 178 F/W OPS. Inbound acft accepting penetrate and radar vectors from IND Center and Dayton Apch expect extensive low altitude vectoring. Opr Tue–Fri 1230–2200Z‡, may be extended other times by NOTAM for mil flying. Std USAF RSRS applies.

WEATHER DATA SOURCES: ASOS 134.975. LAWRS.

COMMUNICATIONS: CTAF 120.7 ATIS 257.875 UNICOM 122.95

R DAYTON APP/DEP CON 126.5 (091°-180°) 118.85 127.225 327.1

**TOWER** 120.7 291.775 (Tue-Fri 1230-2200Z‡) other times by NOTAM. **GND CON** 121.7 225.4 **178 FW OPS** (SABER OPS) 324.7

 $\textbf{AIRSPACE: CLASS D} \text{ svc Tue-Fri } 1230-2200Z\ddagger, \text{ other times by NOTAM, other times CLASS G.}$ 

RADIO AIDS TO NAVIGATION: NOTAM FILE SGH.

- (T) VORW/DME 113.2 SGH Chan 79 N39°50.19′ W83°50.70′ at fld. 1047/4W. VOR portion unusable 156°–200°.

ILS 111.3 I-SGH Rwy 24. Class IE. Unmonitored when twr clsd. No NOTAM MP Tue 1800-2100Z‡.

**STANLEY** N40°51.75′ W84°36.83′ NOTAM FILE DAY.

DETROIT L-27E

NDB (MHW) 411 VFU at Van Wert Co.

STARK COUNTY SHERIFF HELIPORT (See CANTON)

#### **STEUBENVILLE**

JEFFERSON CO AIRPARK (2G2) 4 W UTC-5(-4DT) N40°21.57′ W80°42.00°

1196 B FUEL 80, 100LL NOTAM FILE CLE RWY 14-32: H4400X60 (ASPH) S-7 MIRL

RWY 14: Trees. RWY 32: REIL. PAPI(P4L). Trees.

AIRPORT REMARKS: Attended May-Sep, 1400-0200Z‡, Oct-Apr

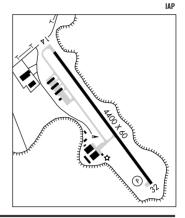
1400-2200Z‡. Deer on and invof arpt. Ultralight activity on and invof arpt weekday evenings and weekends. Rwy 32 VASI OTS indef. ACTIVATE MIRL Rwv 14-32: REIL Rwv 32-CTAF.

COMMUNICATIONS: CTAF/UNICOM 122.8

PITTSBURG APP/DEP CON 124.75

RADIO AIDS TO NAVIGATION: NOTAM FILE HLG.

WHEELING (L) VOR/DME 112.2 HLG Chan 59 N40°15.60' 322° 8.5 NM to fld. 1270/07W. W80°34.12'



**SUMIE** N39°59.17′ W82°45.27′ NOTAM FILE DAY.

NDB (HW/LOM) 391 CM 281° 6.4 NM to Port Columbus Intl. Unmonitored.

CINCINNATI L-29A

DETROIT

L-29B

**TABEY** N41°34.15′ W81°34.43′ NOTAM FILE BKL.

NDB (LOM) 248 BF 245° 5.8 NM to Burke Lakefront, SHUTDOWN.

DETROIT

TIFFIN N41°05.89' W83°12.46' NOTAM FILE CLE.

DETROIT

NDB (MHW) 269 TII at Seneca Co. NDB unmonitored.

L-28J. 29A

#### **TIFFIN**

SENECA CO (16G) 2 SW UTC-5(-4DT) N41°05.64′ W83°12.75′

786 B S4 FUEL 100LL, JET A OX 1, 2 NOTAM FILE CLE

DETROIT L-28J, 29A IAP

RWY 06-24: H4000X75 (ASPH) MIRL

RWY 06: REIL. PAPI(P4L)-GA 3.0° TCH 38'. Tree.

RWY 24: REIL. PAPI(P4L)—GA 3.0°TCH 38'. Thid dspicd 115'. Trees.

AIRPORT REMARKS: Attended 1300Z‡-dusk. Fuel available 24 hrs with credit card. Rwy 06 PAPI unusable byd 5° left of centerline. Rwy 24 VASI unusable byd 5° left of centerline. ACTIVATE MIRL Rwy 06-24; REIL and PAPI Rwy 06 and Rwy 24-CTAF.

WEATHER DATA SOURCES: AWOS-3 121.175 (419) 443-1043.

COMMUNICATIONS: CTAF/UNICOM 123.0

(R) TOLEDO APP/DEP CON 120.8

RADIO AIDS TO NAVIGATION: NOTAM FILE FDY.

FINDLAY (L) VORTAC 108.2 FDY Chan 19 N40°57.32′ W83°45.36′ 073° 26.0 NM to fld. 820/2W. TIFFIN NDB (MHW) 269 TII N41°05.89' W83°12.46' at fld. NOTAM FILE CLE. NDB unmonitored.

TIVERTON N40°27.48′ W82°07.61′ NOTAM FILE CLE.

(L) VOR/DME 116.5 TVT Chan 112 062° 9.2 NM to Holmes Co. 1340/3W.

DETROIT L-29A

DETROIT

ΙΔΡ

H-10G, L-28J

#### TOLEDO

METCALF FLD (TDZ) 6 SE UTC-5(-4DT) N41°33.90′ W83°28.93′ 623 B S4 FUEL 100LL, JET A OX 1, 3 NOTAM FILE TDZ

RWY 14-32: H5829X100 (ASPH-GRVD) S-63, D-85, ST-107 MIRL RWY 14: REIL. PAPI(P4L)-GA 3.0° TCH 34'. Thid dsplcd 578'.

Tower

RWY 32: VASI(V4L)-GA 3.0° TCH 43'. Thid dsplcd 587'. Road. RWY 04-22: H3799X75 (ASPH) S-63, D-85, ST-107 MIRL

RWY 04: REIL, VASI(V4L)—GA 3.0° TCH 45', Thid dspicd 100'.

RWY 22: REIL. VASI(V4R)-GA 3.0° TCH 39'. Thid dspicd 380'. Railroad

#### RUNWAY DECLARED DISTANCE INFORMATION

RWY 14: TORA 4600 TODA 4600 ASDA 5242 LDA 4680 RWY 32: TORA 5268 TODA 5268 ASDA 5268 LDA 4680 AIRPORT REMARKS: Attended Mon-Fri continuously, Sat-Sun

1300-0100Z±. Parallel twy Rwy 04-22 and Rwy 14-32 35' wide. Seagulls on and invof arpt, Ldg fee, ACTIVATE REIL Rwv 04 and Rwy 22-CTAF. Rwy 04 VASI OTS indef.

WEATHER DATA SOURCES: ASOS 121.575 (419) 838-5034.

COMMUNICATIONS: CTAF/UNICOM 123.05

(R) TOLEDO APP/DEP CON 126.1 CLNC DEL 125.6

RADIO AIDS TO NAVIGATION: NOTAM FILE CLE.

WATERVILLE (L) VOR/DME 113.1 VWV Chan 78 N41°27.09′ W83°38.32′ 048° 9.8 NM to fld. 660/2W.

\_\_\_\_\_\_ TOLEDO EXPRESS (TOL) 10 W UTC-5(-4DT) N41°35.21′ W83°48.47′

683 B S4 FUEL 100LL, JET A OX 3 LRA Class I, ARFF Index B NOTAM FILE TOL

HIRL CL

RWY 07: ALSF2. TDZL. Trees.

RWY 25: MALSR, VASI(V4L)—GA 3.0° TCH 51', Trees. 0.3% up. RWY 16-34: H5599X150 (ASPH-GRVD) S-100, D-174, ST-175,

DT-300 MIRL

RWY 16: REIL. PAPI(P4L)-GA 3.0° TCH 48'. Trees.

RWY 34: REIL.

#### RUNWAY DECLARED DISTANCE INFORMATION

RWY 07: TORA 10599 TODA 10599 ASDA 10599 LDA 10599 RWY 16: TORA 5599 TODA 5599 ASDA 5599 LDA 5599 RWY 25: TORA 10599 TODA 10599 ASDA 10599 LDA 10599 RWY 34: TORA 5599 TODA 5599 ASDA 5599 LDA 5599

ARRESTING GEAR/SYSTEM

RWY N7 ←BAK-12 BAK-12 → RWY 25

AIRPORT REMARKS: Attended continuously. Fuel and svc avbl

1300-0500Z‡. Birds and deer on and invof arpt. Twy A west of Rwy 16 and the ramp between Twy B9 and B13 not visible from twr. Customs: Sat-Sun reg must be made prior to 2200Z‡ on Fri, phone 419-259-6424.

WEATHER DATA SOURCES: ASOS (419) 865-8351.

COMMUNICATIONS: ATIS 118.75 UNICOM 122.95

(R) APP/DEP CON 126.1 (360°-179°) 134.35 (180°-359°) 123.975

TOWER 118.1 GND CON 121.9 CLNC DEL 121.75

AIRSPACE: CLASS C svc continuous etc APP CON

RADIO AIDS TO NAVIGATION: NOTAM FILE CLE.

WATERVILLE (L) VOR/DME 113.1 VWV Chan 78 N41°27.09′ W83°38.32′ 319° 11.1 NM to fld. 660/2W.

TOPHR NDB (LOM) 219 TO N41°33.21′ W83°55.27′ 074° 5.5 NM to fld. Unmonitored. NOTAM FILE TOL.

IIS 109 7 I-TOI Rwy 07. Class IE. LOM TOPHR NDB.

ILS 108.7 I-BQE Rwy 25. Class IA.

ASR

**SEAGATE HELISTOP** (6T2) 00 N UTC-5(-4DT) N41°39.25′ W83°31.88′

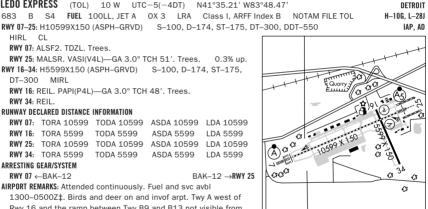
DETROIT

650 NOTAM FILE CLE

HELIPAD H1: H50X50 (CONC)

HELIPORT REMARKS: Unattended. ACTIVATE orange perimeter lgts—CTAF. Helipad H1 NSTD 1-box (2 VASIS). Helipad H1 not marked with "H." Helipad H1 perimeter lgts.

COMMUNICATIONS: CTAF/UNICOM 123.05



264 UHIU

**TOPHR** N41°33.21′ W83°55.27′ NOTAM FILE TOL.

NDB (LOM) 219 TO 074° 5.5 NM to Toledo Express. Unmonitored.

DETROIT

TORONTO

EDDIE DEW MEML AIRPARK (1G8) 2 NW UTC-5(-4DT) N40°28.55′ W80°37.69′

DETROIT

DETROIT

NOTAM FILE CLE

RWY 16-34: 2268X145 (TURF) LIRL (NSTD) RWY 16: Trees RWY 34. Trees

AIRPORT REMARKS: Attended irregularly. ACTIVATE NSTD LIRL Rwy 16-34—CTAF. Rwy 16-34 NSTD LIRL; rwy ends marked with 360° green Igts.

COMMUNICATIONS: CTAF 122.9

TREMONT CITY

MAD RIVER INC (I54) 1 N UTC-5(-4DT) N40°01.20′ W83°49.71′

958 B S3 FUEL 100LL TPA-1803(845) NOTAM FILE DAY

RWY 09-27: 3405X110 (TURF) LIRL (NSTD) RWY 09: Thid dspicd 340'. Pole.

RWY 27: Thid dspicd 900'. Trees.

AIRPORT REMARKS: Attended irregularly, Rwy 09-27 NSTD LIRL; only 2167' Igtd between dspicd thids. Rwy 09 first 340' not marked; Rwy 27 first 505' not marked; only 2560' marked with orange cones; Rwy 09-27—dsplcd thids marked with cones and one green lgt each side of rwy. Rwy lgts OTS indef. ACTIVATE LIRL Rwy 09-27-122.8. For rotating bcn call 513-969-8521.

COMMUNICATIONS: CTAF/UNICOM 123.0

DAYTON APP/DEP CON 118.425 (360°-096°)

TRI-CITY (See SEBRING)

TROY

TROY SKYPARK (371) 4 SW UTC-5(-4DT) N39°59.45′ W84°16.23′

CINCINNATI

NOTAM FILE DAY

RWY 05-23: 3450X100 (TURF) LIRL (NSTD)

RWY 05: Thid dspicd 225'. Trees. Rgt tfc. RWY 23: Thid dspicd 985'. Trees.

AIRPORT REMARKS: Attended irregularly. ACTIVATE NSTD LIRL Rwy 05-23—CTAF. Rwy 05-23 NSTD LIRL; Rwy 23 end marked with 360° red lgts; Rwy 05-23 dsplcd thld lgtd with one green lgt each side of rwy; Rwy 05-23 marked with white buckets and lights; Rwy 05-23 dsplcd thld marked by green lgts and buckets.

COMMUNICATIONS: CTAF 122.9

DAYTON APP/DEP CON 134.45 (181°-359°)

WACO FLD (1WF) 2 S UTC-5(-4DT) N40°00.89' W84°11.88'

CINCINNATI

820 NOTAM FILE DAY

RWY 18-36: 2428X100 (TURF)

RWY 18: Thid dspicd 600'. Tree. RWY 36: Trees.

\_\_\_\_\_\_

AIRPORT REMARKS: Attended Mon-Fri dawn-dusk. 405' (AGL) lgtd radio antenna 4200' NE of Rwy 18. Rwy 18-36 edges, thids, and dsplcd thid Rwy 18 marked with white barrels.

**COMMUNICATIONS: CTAF 122.9** 

UNION CO (See MARYSVILLE)

UNIVERSITY N39°15.44′ W82°07.56′ NOTAM FILE DAY.

CINCINNATI L-29B

NDB (MHW) 250 UGS 247° 5.5 NM to Ohio University Snyder Fld.

#### **UPPER SANDUSKY**

WYANDOT CO (56D) 4 NW UTC-5(-4DT) N40°53.00′ W83°18.87′

830 B NOTAM FILE CLE

RWY 18-36: H3997X75 (ASPH) S-12.5 MIRL

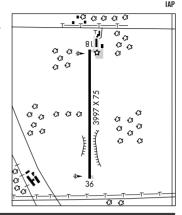
RWY 18: Trees. RWY 36: P-line.

AIRPORT REMARKS: Unattended. ACTIVATE MIRL Rwy 18–36—123.050. COMMUNICATIONS: CTAF 122.9

- R MANSFIELD APP/DEP CON 124.2 (1100-0400Z‡)
- R CLEVELAND CENTER APP/DEP CON 135.1 (0400-1100Z‡)

RADIO AIDS TO NAVIGATION: NOTAM FILE FDY.

FINDLAY (L) VORTAC 108.2 FDY Chan 19 N40°57.32′ W83°45.36′ 104° 20.5 NM to fld. 820/2W.



#### **URBANA**

**GRIMES FLD** (I74) 1 N UTC-5(-4DT) N40°07.96′ W83°45.21′

DETROIT L-27E

DETROIT

L-28J. 29A

1068 B S2 **FUEL** 100LL, JET A TPA—1868(800) NOTAM FILE DAY **RWY 02-20**: H4400X100 (ASPH) MIRL

RWY 02: REIL. PAPI(P4R). Tree. RWY 20: REIL. PAPI(P4L). Tree.

AIRPORT REMARKS: Attended Mon-Fri 1300–2130Z‡, Sat-Sun irregularly. Deer and birds on and invof arpt. ACTIVATE MIRL Rwy 02–20; REIL Rwys 02 and 20—CTAF.

WEATHER DATA SOURCES: AWOS-3 118.325 (937) 484-5863.

COMMUNICATIONS: CTAF/UNICOM 122.7

(R) DAYTON APP/DEP CON 118.425 (360°-090°)

RADIO AIDS TO NAVIGATION: NOTAM FILE DAY.

ROSEWOOD (H) VORTAC 117.5 ROD Chan 122 N40°17.27′ W84°02.59′ 130° 16.2 NM to fld. 1080/5W.

\_\_\_\_\_

DETROIT

**WELLER** (38I) 3 SE UTC-5(-4DT) N40°05.47′ W83°41.36′ 1150 NOTAM FILE DAY

RWY 09-27: 2534X75 (TURF)

RWY 09: Trees. RWY 27: P-line.

AIRPORT REMARKS: Attended irregularly. Rwy 09–27 outlined with yellow tires. Trees on both sides of rwy at W end. Trees W of twy and S of rwy.

COMMUNICATIONS: CTAF/UNICOM 123.0

VAN WERT CO (VNW) 2 SW UTC-5(-4DT) N40°51.88′ W84°36.57′

DETROIT

785 B **FUEL** 100LL, JET A TPA—1597(812) NOTAM FILE DAY **RWY 09-27**: H4000X75 (ASPH) S-8 MIRL

L-27E IAP

RWY 09: REIL. PAPI(P4L). P-line. RWY 27

RWY 27: REIL. PAPI(P4L). Trees.

RWY 18-36: 2610X105 (TURF)

RWY 18: Thid dspicd 315'. Tree. RWY 36: Thid dspicd 510'. P-line.

AIRPORT REMARKS: Attended Apr-Oct Mon-Sat 1400-2300Z‡, Sun by prior arrangement, Nov-Mar Mon-Sat

1500-2200Z‡, Sun 1700-2300Z‡. Parachute Jumping. Ultralights opr evenings, weekends and in no-wind conditions. Rwy 09 REIL OTS indef. Rwy 18 and Rwy 36 dspicd thid marked with white L-shaped 2'×6' concrete pads. Major airframe repairs. ACTIVATE MIRL Rwy 09-27 and REIL and PAPI Rwy 09 and Rwy 27—CTAF.

WEATHER DATA SOURCES: AWOS-3 125.175 (419) 232-2967.

COMMUNICATIONS: CTAF/UNICOM 123.0

R FORT WAYNE APP/DEP CON 132.15 (SE-NE of active rwy) 127.2 (SW-NW of active rwy)

RADIO AIDS TO NAVIGATION: NOTAM FILE FWA.

FORT WAYNE (H) VORTACW 117.8 FWA Chan 125 N40°58.74′ W85°11.28′ 104° 27.2 NM to fld. 793/00E. STANLEY NDB (MHW) 411 VFU N40°51.75′ W84°36.83′ at fld. NOTAM FILE DAY.

COMM/NAV/WEATHER REMARKS: Approach control sectorization based upon Fort Wayne rwy usage.

**VERSAILLES** N40°12.37′ W84°31.36′ NOTAM FILE DAY.

DETROIT L-27E

NDB (MHW) 356 VES at Darke Co. Unmonitored. OTS indef.

#### **VERSAILLES**

DARKE CO (VES) 2 SW UTC-5(-4DT) N40°12.27′ W84°31.92′

1007 B S3 FUEL 100LL, JET A+ NOTAM FILE DAY

RWY 09-27: H4512X75 (ASPH) S-12.5E MIRL

RWY 09: REIL. PAPI(P2L). Road.

RWY 27: REIL. PAPI(P2L). Acft.

AIRPORT REMARKS: Attended dawn-dusk. FBO CLOSED on major holidays. CAUTION: Deer occasionally on rwy. ACTIVATE MIRL Rwy 09-27: REIL Rwys 09 and 27-CTAF.

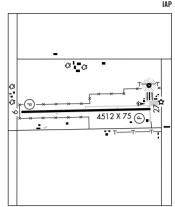
WEATHER DATA SOURCES: AWOS-3 123.75 (937) 526-3154. COMMUNICATIONS: CTAF/UNICOM 122.8

R DAYTON APP/DEP CON 134.45 (181°-359°)

RADIO AIDS TO NAVIGATION: NOTAM FILE DAY.

DAYTON (L) VOR/DME 114.5 DON Chan 92 N40°00.99' W84°23.81' 332° 12.9 NM to fld. 990/1W. HIWAS.

VERSAILLES NDB (MHW) 356 VES N40°12.37' W84°31.36' at fld. Unmonitored. OTS indef.



DETROIT

L-27E

VINTON CO (See McARTHUR)

WACO FID (See TROY)

#### WADSWORTH

WADSWORTH MUNI (3G3) 2 SW UTC-5(-4DT) N41°00,19' W81°45,39'

974 B FUEL 100LL, JET A1+ NOTAM FILE CLE

RWY 02-20: H3529X75 (ASPH) MIRL

RWY 02: VASI(V2R)-GA 3.5° TCH 27'. Thid dsplcd 129'. Tree. RWY 20: VASI(V2L)-GA 3.5°TCH 48'. P-line.

RWY 10-28: H2392X35 (ASPH) 0.4% up E

RWY 10: Tree. RWY 28: Thid dspicd 237'. Tree.

AIRPORT REMARKS: Attended 1300-2300Z‡. Arpt unattended all Federal Holidays. No line of sight between rwy 02 and 10. Rwy 10 CLOSED for tkf when wind is less than 15 knots from the E. Gliders use rgt tfc to Rwy 10. CAUTION: Glider activity use Rwy 10-28. Rwy 20 calm rwy blo 4 knots for noise abatement. Avoid hospital to the north. ACTIVATE MIRL Rwy 02-20 and VASI Rwy 02 and Rwy 20-CTAF.

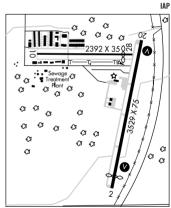
COMMUNICATIONS: CTAF/UNICOM 122.8

R AKRON-CANTON APP/DEP CON 118.6 (1100-0500Z‡)

R CLEVELAND CENTER APP/DEP CON 134.9 (0500-1100Z‡)

RADIO AIDS TO NAVIGATION: NOTAM FILE CAK.

AKRON (L) VOR/DME 114.4 ACO Chan 91 N41°06.47' W81°12.09' 260° 26 NM to fld. 1194/4W.



WELTZIEN SKYPARK (15G) 3 W UTC-5(-4DT) N41°01.70′ W81°47.91′

1210 B S4 FUEL 80, 100LL TPA-2000(790) NOTAM FILE CLE

RWY 03-21: H2410X37 (ASPH) LIRL(NSTD)

RWY 03: Thid dspicd 178'. Trees. RWY 21: PVASI (PSIL). Thid dsplcd 50'. Trees.

AIRPORT REMARKS: Attended continuously. Pavement strength limit to 6500 pounds per arpt manager. Rwy 03-21 no touch and go ldgs. ACTIVATE NSTD LIRL Rwy 03-21-CTAF. Rwy 03-21 NSTD LIRL due to spacing and not FAA approved L-800 series.

COMMUNICATIONS: CTAF/UNICOM 123.05

DETROIT

DETROIT L-29B

**WAKEMAN** (164) 3 NE UTC-5(-4DT) N41°17.59′ W82°22.24′ 848 S4 **FUEL** 100LL NOTAM FILE CLE

**RWY 03-21:** H3800X55 (ASPH) LIRL (NSTD)

RWY 03: Tree. RWY 21: Trees.

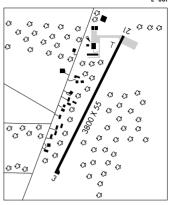
AIRPORT REMARKS: Attended Mon-Sat 1300Z‡-dusk, Sun

1400Z‡–dusk. ACTIVATE NSTD LIRL Rwy 03–21—CTAF. Rwy 03–21 thid igts offset. Rwy 03–21 NSTD LIRL, Rwy 21 igts are located 135' up rwy.

COMMUNICATIONS: CTAF/UNICOM 122.8

RADIO AIDS TO NAVIGATION: NOTAM FILE CLE.

DRYER (H) VOR/DME 113.6 DJB Chan 83 N41°21.48′ W82°09.72′ 253° 10.2 NM to fld. 780/5W. HIWAS.



#### WAPAKONETA

**NEIL ARMSTRONG** (AXV) 8 SW UTC-5(-4DT) N40°29.61′ W84°17.89′

DETROIT H-10g. L-27e

ΙΔΡ

913 B S2 **FUEL** 100LL, JET A1+ OX 3 TPA—1903(990) NOTAM FILE DAY **RWY 08-26**: H5500X100 (ASPH-GRVD) MIRL

RWY 08: Thid dsplcd 700'. Trees.

RWY 26: REIL. VASI(V2L)—GA 3.0 TCH 53'. Thid dsplcd 237'. Road.

RWY 18-36: 2631X80 (TURF)

RWY 18: Thid dspicd 290', Road. RWY 36: Trees.

 $\textbf{AIRPORT REMARKS:} \ \text{Attended } 1300-2200\text{Z}\ddagger. \ \text{Rwy } 18-36 \ \text{CLOSED indef.} \ \text{Rwy } 18-36 \ \text{surface rough and uneven.}$ 

 ${\tt ACTIVATE\ MIRL\ Rwy\ 08-26\ and\ REIL\ Rwy\ 26-122.7.\ Rwy\ 26\ REIL\ OTS\ indef.\ Rwy\ 26\ VASI\ OTS\ indef.}$ 

WEATHER DATA SOURCES: AWOS-3 128.325 (419) 753-2821.

COMMUNICATIONS: CTAF/UNICOM 122.8

ROSEWOOD RCO 122.1R 117.5T (DAYTON RADIO)

(R) DAYTON APP/DEP CON 118.425 (360°-090°)

RADIO AIDS TO NAVIGATION: NOTAM FILE DAY.

ROSEWOOD (H) VORTAC 117.5 ROD Chan 122 N40°17.27′ W84°02.59′ 322° 17 NM to fld. 1080/5W. ILS/DME 109.15 I–AXV Chan 28Y Rwy 26. LOC only. ILS OTS indef. DME OTS indef.

WARREN (62D) 5 NW UTC-5(-4DT) N41°16.02′ W80°55.64′

DETROIT

905 S2 **FUEL** 100LL NOTAM FILE CLE

RWY 04-22: H2907X30 (ASPH) LIRL (NSTD)

RWY 04: Thid dspicd 87'. Trees. RWY 22: Thid dspicd 578'. Trees.

RWY 18-36: 2700X140 (TURF)

RWY 18: Trees. RWY 36: Trees.

AIRPORT REMARKS: Attended irregularly. ACTIVATE NSTD LIRL Rwy 04–22—123.3. Rwy 04–22 NSTD LIRL; Rwy 04 no rwy end Igts; Rwy 22 dsplcd thld wrong color. Rwy 18 marked with yellow buckets. Rwy 04–22 LIRL OTS indef.

COMMUNICATIONS: CTAF/UNICOM 122.8

#### WASHINGTON COURT HOUSE

RWY 05: Railroad.

FAYETTE CO (I23) 2 NE UTC-5(-4DT) N39°34.23′ W83°25.23′

CINCINNATI H-10g. L-29A

ΙΔΡ

RWY 05-23: H5097X75 (ASPH) S-30, D-40 MIRL

RWY 23: REIL. PAPI(P4L). Railroad.

AIRPORT REMARKS: Attended Mon-Sat 1300-2300Z‡. ACTIVATE MIRL Rwy 05-23-CTAF.

980 B FUEL 100LL, JET A, MOGAS TPA-1780(800) NOTAM FILE DAY

WEATHER DATA SOURCES: AWOS-3 118.775

COMMUNICATIONS: CTAF/UNICOM 122.8

(R) COLUMBUS APP/DEP CON 132.3 134.35

RADIO AIDS TO NAVIGATION: NOTAM FILE FFO.

MIDWEST (T) VORW/DME 112.9 MXQ Chan 76 N39°25.78′ W83°48.07′ 068° 19.6 NM to fld. 1050/4W.

COURT HOUSE NDB (MHW) 414 CSS N39°36.05′ W83°23.50′ 222° 2.3 NM to fld. NOTAM FILE DAY. NDB unusable 115°–165° byd 20 NM.

EC, 17 DEC 2009 to 11 FEB 2010

DETROIT L-30F

WATERVILLE N41°27.09′ W83°38.32′ NOTAM FILE CLE.
(() YOR/DME 113.1 VWV Chan 78 319° 11.1 NM to Toledo Express. 660/2W.
RCO 122.1R 113.1T (CLEVELAND RADIO)

DETROIT H-10G, L-28J

DETROIT

L-28J

IAP

#### WAUSEON

FULTON CO (USE) 4 N UTC-5(-4DT) N41°36.61′ W84°07.63′ 779 B S4 FUEL 100LL, JET A, A1+ NOTAM FILE CLE RWY 09-27: H3882X75 (ASPH) S-30 LIRL

RWY 09: REIL. PAPI(P4L). Road.

RWY 27: REIL. PAPI(P4R). Trees. Rgt tfc.

RWY 18-36: 2117X75 (ASPH-TURF)

RWY 18: Trees. RWY 36: Tree.

AIRPORT REMARKS: Attended Mon-Sat 1300Z‡-dusk, Sun

1500Z‡-dusk. 100LL self serve. Rwy 18–36 359' of center section paved. First 270' of Rwy 18 turf and first 1328' of Rwy 36 turf. Deer occasionally on rwy. Twy clsd indef. Rwy 27 REIL OTS indef. ACTIVATE LIRL Rwy 09–27; REIL Rwys 09 and 27; PAPI Rwy 09 and Rwy 27—CTAF.

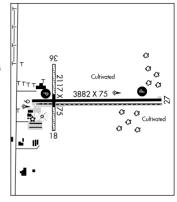
COMMUNICATIONS: CTAF/UNICOM 123.0

R TOLEDO APP/DEP CON 134.35

RADIO AIDS TO NAVIGATION: NOTAM FILE CLE.

**WATERVILLE (L) VOR/DME** 113.1 VWV Chan 78 N41°27.09′ W83°38.32′ 296° 24 NM to fld. 660/2W.

NDB (MHW) 375 USE N41°36.55′ W84°07.96′ at fld.



WAVERLY N39°10.02′ W82°55.93′ NOTAM FILE DAY.

NDB (MHW) 385 EOP at Pike Co. NDB unusable byd 15 NM.

CINCINNATI L-29A

#### WAVERLY

PIKE CO (EOP) 3 NE UTC-5(-4DT) N39°10.02′ W82°55.69′ 660 B FUEL 100LL, JET A NOTAM FILE DAY RWY 07-25: H4900X75 (ASPH) S-58 MIRL

RWY 07: REIL. PAPI(P4L)-GA 4.0° TCH 37'. Tree.

RWY 25: REIL. PAPI(P4L)—GA 3.0° TCH 25'. Tree.

AIRPORT REMARKS: Attended Mon-Fri 1300-2130Z‡. 24 hr credit card self svc avbl. Deer on and invof arpt. ACTIVATE MIRL Rwy 07-25—CTAF, PAPI Rwy 07 and Rwy 25 on dusk-dawn.

WEATHER DATA SOURCES: AWOS-A 118.4.
COMMUNICATIONS: CTAF/UNICOM 123.0

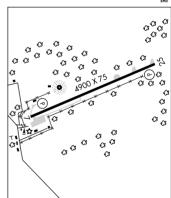
(R) INDIANAPOLIS CENTER APP/DEP CON 135.575

RADIO AIDS TO NAVIGATION: NOTAM FILE LOU.

YORK (L) VORTAC 112.8 YRK Chan 75 N38°38.65′ W82°58.70′ 009° 31.4 NM to fld. 1040/5W.

WAVERLY NDB (MHW) 385 EOP N39°10.02′ W82°55.93′ fld. NOTAM FILE DAY. NDB unusable byd 15 NM.

CINCINNATI L-29A IAP



at

WAYNE CO (See WOOSTER)

WAYNESVILLE

**RED STEWART AIRFIELD** (4ØI) 4 W UTC-5(-4DT) N39°30.32′ W84°07.31′

CINCINNATI

955 S4 FUEL 100LL NOTAM FILE DAY

RWY 08-26: 3142X150 (TURF)

RWY 08: Crops. RWY 26: Thid dspicd 540', Tree.

AIRPORT REMARKS: Attended 1300Z‡-dusk. Transient tfc 1 Jan-15 Apr notification required for rwy condition prior to arrival 513-897-7717. Rwys and aprons fair rolling turf; sod N and S of rwy used as twy. Banner towing and gliders on and invof arpt. Glider operations on N taxiway. Rwy 26 dsplcd thld marked with 3 outboard cones on each side of rwy. Rwy 08-26 marked with yellow cones.

COMMUNICATIONS: CTAF 122.9

DAYTON APP/DEP CON 126.5 (091°-180°)

WEIKER (See GREEN SPRINGS)

WELLER (See URBANA)

WELLINGTON

**READER-BOTSFORD** (67D) 00 SE UTC-5(-4DT) N41°09.75′ W82°12.16′

DETROIT

864 TPA—1650(786) NOTAM FILE CLE

RWY 18-36: 2850X100 (TURF)

RWY 18: Trees. RWY 36: Trees.

AIRPORT REMARKS: Attended Apr-Nov Wed, Sat-Sun dalgt hrs. Arpt CLOSED 1 Dec to 30 Apr. Glider ops. Monitor glider activities on CTAF. Rwy 18–36 lgtd thld Rwy 18 relocated 375'; Rwy 36 relocated 800'; 1825' Rwy 18–36 usable for ngt ops.

COMMUNICATIONS: CTAF 122.9

WELTZIEN SKYPARK (See WADSWORTH)

WEST UNION N38°51.36′ W83°33.83′ NOTAM FILE DAY.

NDB (MHW) 359 AMT at Alexander Salamon, NDB OTS indef.

CINCINNATI

L-26G

WEST UNION

ALEXANDER SALAMON (AMT) 4 NW UTC-5(-4DT) N38°51.09′ W83°33.98′

CINCINNATI

896 B **FUEL** 80, 100LL NOTAM FILE DAY **RWY 05-23**: H3762X65 (ASPH) MIRL 0.3% up NE

L-26G

RWY 05: Trees. RWY 23: REIL. PAPI(P4L)—GA 3.0° TCH 30'. Trees.

AIRPORT REMARKS: Attended Mon-Sat dalgt hrs. Fuel avbl 24 hrs—credit card. ACTIVATE MIRL Rwy 05–23; PAPI Rwy 23 and REIL Rwy 23—CTAF.

COMMUNICATIONS: CTAF/UNICOM 122.8

R INDIANAPOLIS CENTER APP/DEP CON 124.225

RADIO AIDS TO NAVIGATION: NOTAM FILE LOU.

YORK (L) VORTAC 112.8 YRK Chan 75 N38°38.65′ W82°58.70′ 299° 30.3 NM to fld. 1040/5W. WEST UNION NDB (MHW) 359 AMT N38°51.36′ W83°33.83′ at fld. NOTAM FILE DAY. OTS indef.

WILLARD (8G1) 1 S UTC-5(-4DT) N41°02.33′ W82°43.47′

DETROIT L-29A

ΙΔΡ

967 FUEL 100LL NOTAM FILE CLE

**RWY 10–28:** H4028X65 (ASPH) MIRL 0.8% up W

RWY 10: Thid dsplcd 300'. Building. RWY 28: Thid dsplcd 610'. Trees.

AIRPORT REMARKS: Attended Mon-Sat 1300-2200Z‡. For fuel after hrs call 567-224-2492. ACTIVATE MIRL Rwy 10-28—CTAF.

COMMUNICATIONS: CTAF 122.9

MANSFIELD RCO 122.6 122.1R 108.8T (CLEVELAND RADIO)

R MANSFIELD APP/DEP CON 124.2 (1100-0400Z‡) CLEVELAND CENTER APP/DEP CON 134.9 (0400-1100Z‡)

 $\textbf{RADIO AIDS TO NAVIGATION:} \ \ \mathsf{NOTAM} \ \ \mathsf{FILE} \ \ \mathsf{MFD}.$ 

MANSFIELD (L) VORTAC 108.8 MFD Chan 25 N40°52.12′ W82°35.46′ 332° 11.9 NM to fld. 1210/3W.

WILLIAMS CO (See BRYAN)

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WILLOUGHBY LOST NATION MUNI (LNN) 3 N UTC-5(-4DT) N41°41.04′ W81°23.39′
                                                                                                         DETROIT
       626 B S4 FUEL 100LL, JET A OX 1, 2 NOTAM FILE CLE
                                                                                                    H-10G, L-30G
       RWY 05-23: H5028X100 (ASPH) S-68, D-80, DT-124 MIRL
                                                                                                            ΙΔΡ
         RWY 05: REIL. PAPI(P4R). Thid dsplcd 428'. Pole.
                                                           RWY 23: REIL. PAPI(P4L). Trees.
       RWY 10-28: H4272X100 (ASPH) S-68, D-80, DT-124 MIRL
         RWY 10: REIL. PAPI(P2L). Trees.
                                            RWY 28: REIL. PAPI(P2L). Thid dspicd 1124'. Poles.
       AIRPORT REMARKS: Attended 1200-0200Z‡. For arpt attendance or fuel svs after hrs call 440-942-7092 from
         0400-1100Z‡ for prior arrangements. Multiple practice ldg and tkf prohibited Mon-Fri 0400-1300Z‡; Sat-Sun
         and holidays 0400-1400Z‡. Deer and Birds on and invof arpt. Rwy 05 REIL OTS indef. Rwy 23 PAPI OTS indef.
         Rwy 23 REIL OTS indef, ACTIVATE MIRL Rwy 05-23 and Rwy 10-28; REIL Rwys 05; Rwy 23; Rwy 10 and Rwy 28;
         and PAPI Rwys 05; Rwy 23; Rwy 10 and Rwy 28—CTAF. Ldg fee for all commercial acft by weight; multi-engine
          and larger.
       COMMUNICATIONS: CTAF/UNICOM 122.725
      R CLEVELAND APP/DEP CON 125.35
       RADIO AIDS TO NAVIGATION: NOTAM FILE CLE.
         LOST NATION (T) VORW/DME 110.2 LNN Chan 39 N41°41.06' W81°23.37' at fld. 620/8W. Unmonitored.
         LAKELAND NDB (MHW) 263 LQL N41°40.95′ W81°22.74′ at fld. NDB unmonitored.
       COMM/NAV/WEATHER REMARKS: UNICOM freq unmonitored May-Sep (0300-1200Z‡); Oct-Apr (0200-1200Z‡). For IFR
         clearance ctc Cleveland apch control at 216-898-2040.
WILMINGTON
     AIRBORNE AIRPARK (ILN) 2 SE UTC-5(-4DT) N39°25.68′ W83°47.53′
                                                                                                      CINCINNATI
       1077 B S4 FUEL JET A OX 1, 2
                                                 Class IV, ARFF Index A NOTAM FILE ILN
                                                                                                     H-10G, L-27E
       RWY 04L-22R: H10701X150 (CONC-GRVD) S-100, D-200, ST-175, DT-390, DDT-750
                                                                                        HIRL CL
                                                                                                            ΙΔΡ
         RWY 04L: MALSR. PAPI(P4L)-GA 3.0° TCH 62'.
         RWY 22R: ALSF-2. TDZL. PAPI(P4L)-GA 3.0° TCH 71'.
         0.4% down.
       RWY 04R-22L: H9000X150 (CONC-GRVD) S-100, D-200, ST-175,
         DT-390, DDT-750 HIRL CL
         RWY 04R: MALSR. PAPI(P4L)-GA 3.0° TCH 71'. 0.3% up.
         RWY 22L: ALSF2. TDZL. PAPI(P4L)-GA 3.0° TCH 71'. 0.4% down.
       RUNWAY DECLARED DISTANCE INFORMATION
         RWY 04L: TORA-10701 TODA-10701 ASDA-10701 LDA-10701
         RWY 04R: TORA-9000 TODA-9000 ASDA-9000 LDA-9000
         RWY 22L: TORA-9000 TODA-9000 ASDA-9000 LDA-9000
         RWY 22R: TORA-10701 TODA-10701 ASDA-10701 LDA-10701
       AIRPORT REMARKS: Attended continuously. Closed to scheduled air
         carrier ops with greater than 9 passenger seats and unscheduled
         air carrier ops greater than 30 passenger seats. 90-day PPR, call
         arpt manager 937-382-5591. Rwy 04L-22R has 1000' paved
         area on SW end and 200' paved area on NE end. Rwy 04R-22L
         has 200' paved area on each end. Twy C clsd SR-SS, For HIRL
         Rwy 04L-22R and Rwy 04R-22L when twr clsd contact ops on
         119.47. Rwy 04R touchdown, midpoint and rollout RVR avbl. Rwy 22L touchdown, midpoint and rollout RVR avbl.
         Four hrs PPR for all transient acft call arpt manager 937-382-5591 extension 2960 during operating hrs. After
         hrs call flight control 937-302-5591 extension 2450. Ldg fee. U.S. Customs user fee arpt.
       WEATHER DATA SOURCES: ASOS (937) 383-7334.
       COMMUNICATIONS: CTAF 119.475 ATIS 124.925
      R DAYTON APP/DEP CON 126.5 (091°-180°) 118.85 127.225
         WILMINGTON TOWER 119.475, 125.6 (04R-22L in instrument meteorological conditions) Mon 1200-Sat 2300Z‡,
           Sun 1100-2300Z‡.
         GND CON 121.6
                        CLNC DEL 125.6
       AIRSPACE: CLASS D svc Mon 1200Z‡-Sat 2300Z‡, Sun 1100-2300Z‡; other times CLASS E.
       RADIO AIDS TO NAVIGATION: NOTAM FILE ILN.
         MIDWEST (T) VORW/DME 112.9 MXQ Chan 76 N39°25.78′ W83°48.07′ at fld. 1050/4W.
           Unmonitored when twr clsd.
         AIRBO NDB (MHW/LOM) 407 IL N39°29.58′ W83°44.29′ 217° 4.6 NM to fld.
           Unmonitored Sat-Sun 2300-1100Z‡ and Sun 2300 til Mon 1200Z‡.
         CUBLA NDB (MHW/LOM) 299 HW N39°21.21′ W83°52.55′ 045° 5.9 NM to fld.
         ILS 110.7
                     I-HWM Rwy 04L. LOM CUBLA NDB. Unmonitored when twr clsd. LOC unusable byd 15° left or
           right of course.
                        I–IYV
                                 Chan 30(Y)
                                               Rwy 04R. Class IT.
         ILS/DME 109.35
                                                                      Unmonitored when twr clsd.
         ILS 110.7 I-ILN Rwy 22R. Class IIIE. LOM AIRBO NDB. Unmonitored when twr clsd.
                        I-RHX Chan 30(Y) Rwy 22L. Unmonitored when twr clsd.
         ILS/DME 109.35
       COMM/NAV/WEATHER REMARKS: Emergency frequency 121.5 not avbl at twr.
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UHIU 271

CLINTON FLD (166) 4 NW UTC-5(-4DT) N39°30.15′ W83°51.80 CINCINNATI 1033 B S4 FUEL 100LL, JET A NOTAM FILE DAY 1-27F RWY 03-21: H3579X65 (ASPH) S-12.5 MIRL 0.3% up NE ΙΔΡ RWY 03: PAPI(P2L)—GA 3.0° TCH 20'. Trees. RWY 21: PAPI(P2L)—GA 3.75° TCH 20'. Trees. AIRPORT REMARKS: Attended May-Sep 1300-0100Z‡, Oct-Apr 1300-2200Z‡. Fuel Jet A unavbl indef. FBO closed Thanksgiving; Christmas and Easter. After hrs call 937-725-2782. Deer and birds on and invof arpt. ACTIVATE MIRL Rwy 03-21 and PAPI Rwy 03 and Rwy 21-CTAF. WEATHER DATA SOURCES: AWOS-3 124.175 (937) 382-1376. COMMUNICATIONS: CTAF/UNICOM 123.0 R DAYTON APP/DEP CON 126.5 (091°-180°) 118.85 127.225 RADIO AIDS TO NAVIGATION: NOTAM FILE FFO. MIDWEST (T) VORW/DME 112.9 MXO Chan 76 N39°25.78′ W83°48.07′ 331° 5.2 NM to fld 1050/4W. \_\_\_\_\_\_ **HOLLISTER FLD** (2B6) 5 E UTC-5(-4DT) N39°26.25′ W83°42.50′ CINCINNATI 1090 NOTAM FILE DAY RWY 05-23: 3203X80 (TURF) RWY 05: Thid dspicd 92', Crops. RWY 23: Thid dsplcd 565', P-Line. RWY 13-31: 2670X80 (TURE) RWY 31: Thid dspicd 732'. Fence. RWY 13: Thid dspicd 250', Fence. AIRPORT REMARKS: Attended dalgt hrs. Rwy 13-31 CLOSED indef. CAUTION—pheasants released N side of rwy for hunting Sep-Apr. Model acft radio-control area S of Rwy 23. Call for rwy conditions prior to Idg from Nov-Apr.

Rwy 05-23 dspld thids marked with white tires. Rwy 13-31 dsplcd thids marked with white tires.

WOOD CO (See BOWLING GREEN)

COMMUNICATIONS: CTAF 122.9

#### WOODSFIELD

MONROE CO (4G5) 1 N UTC-5(-4DT) N39°46.74′ W81°06.17′ 1197 B S4 FUEL 80. 100LL NOTAM FILE CLE

RWY 07-25: H3805X75 (ASPH) S-18 MIRL

RWY 25: REIL. Trees. RWY 07: Thid dspicd 173'. Trees.

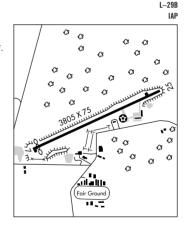
AIRPORT REMARKS: Attended irregularly. For fuel call 740-472-1882. ACTIVATE MIRL Rwy 07-25; rotating bcn and REIL Rwy 25-CTAF. COMMUNICATIONS: CTAF/UNICOM 122.8

BELLAIRE RCO 122.1R 117.1T (CLEVELAND RADIO)

R CLEVELAND CENTER APP/DEP CON 120.4

RADIO AIDS TO NAVIGATION: NOTAM FILE CLE.

BELLAIRE (H) VOR/DME 117.1 AIR Chan 118 N40°01.02' W80°49.04′ 230° 19.4 NM to fld. 1290/7W.



#### WOOSTER

WAYNE CO (BJJ) 6 NE UTC-5(-4DT) N40°52.49′ W81°53.30′

DETROIT H-10G, L-29B

1136 B S4 FUEL 100LL, JET A1+ OX 4 NOTAM FILE BJJ

CINCINNATI

RWY 10-28: H5191X100 (ASPH) S-30 HIRL 0.5% up E

IAP

RWY 28: REIL. VASI(V4R)—GA 3.0° TCH 33'. Thid dsplcd 218'. Road. RWY 10: REIL. Trees.

AIRPORT REMARKS: Attended Mon-Fri 1200-0000Z‡, Sat-Sun 1400-2300Z‡, Rwy 28 VASI unusable byd 8° left of centerline. HIRL Rwy 10-28 preset low ints dusk-dawn; to increase ints and ACTIVATE REIL Rwy 10 and Rwy 28—CTAF

WEATHER DATA SOURCES: ASOS 118.075 (330) 669-9105.

COMMUNICATIONS: CTAF/UNICOM 122.8

- R AKRON-CANTON APP/DEP CON 118.6 (1100-0500Z†) CLNC DEL 121.75
- R CLEVELAND CENTER APP/DEP CON 134.9 (0500-1100Z‡)

RADIO AIDS TO NAVIGATION: NOTAM FILE CLE.

BRIGGS (L) VOR/DME 112.4 BSV Chan 71 N40°44.44′ W81°25.93′ 295° 22.3 NM to fld. 1230/4W.

823 B TPA—See Remarks NOTAM FILE FFO

WRIGHT PATTERSON AFB (FFO) (KFFO)

RWY 05L-23R: H12600X300 (PEM-GRVD)

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RWY 05L: PAPI(P4L)—GA 3.0° TCH 50'.
                                               RWY 23R: ALSF1. PAPI(P4R)-GA 3.0° TCH 50'. Rgt tfc.
                                   PNC 118 R/B/W/T MIRL
  RWY 05R-23L: H7000X150 (ASPH)
    RWY 05R: PAPI(P4L).
                             RWY 23L: PAPI(P4L).
  RUNWAY DECLARED DISTANCE INFORMATION
    RWY 05L: TORA-12601 TODA-12601
    RWY 05R: TORA-7000 TODA-7000
    RWY 23L: TORA-7000 TODA-7000
    RWY 23R: TORA-12601 TODA-12601
  ARRESTING GEAR/SYSTEM
     RWY 05L: ←BAK-14 BAK-12(B) (1676')
                                                                             BAK-14 BAK-12B(B) (1740') RWY 23R
  MILITARY SERVICE: A-GEAR Rwy 05L-23R south end arresting gear located 864' s of dsplcd thld.
    JASU 9(A/M32A-86) 1(MC-1A) 4(AM32-95) (8)(A/M32A-60A)
                                                                FUEL J8
                                                                            FLUID SP PRESAIR LHOX LOX
    OIL 0-148-156 SOAP Avbl weekdays 1200-2130Z‡ except Federal holiday.
                                                                               TRAN ALERT Opr 1000-0500Z±.
     avbl other times with 24 hr prior notice to Base OPS. Fleet svc avbl 2 hr prior notice. Payment rgr by Avcard.
  MILITARY REMARKS: See FLIP AP/1 Supplementary Arpt Remarks. RSTD All dep acft fly rwy heading until 1800' unless
    twr approves otherwise. Inbound acft with VIP ctc Base OPS on PTD 30 minutes prior to arrival. Arm/de-arm
    area S end Twy B clsd. Portion of Twy A located NE of the south entrance to the West Ramp is permanently clsd.
    Twy A1 entrance to the West Ramp is permanently clsd. CAUTION Bird Watch Condition Phase I (Nov-Jun)
    indicates lgt bird activity. Phase II (Jul-Oct) indicates heavy bird activity normally associated with migratory
    season. Portions of the flameout and overhead tfc pat not visible from twr. Unlgtd obstructions surround afld.
    Multiple crane ops 2.7 NM southwest of KFFO. 1171' MSL and blo. TFC PAT TPA-Rectangular tactical/trainer
    2800(1977), other turbojet/turboprop 2300(1477), Igt reciprocating engine acft (12,500 lb or blo gross weight)
    1800(977), overhead 2800(1977). CSTMS/AG/IMG Ltd CSTMS avbl. 24 hr prior notice for CSTMS requests. Call
    DSN: 787-2131 COM: 937-257-2131. MISC First 2600' Rwy 05L conc. Rwy 05L-23R 10060' avbl for tkof and
    ldg. Rwy 05L dsplcd thld clsd for taxi, tkof and tkof and ldg roll on Rwy 23R due to high foreign object damage
    potential; do not use south end and dsplcd thld for tkof and ldg computations. Base OPS DSN 787-2131,
    C937–257–2131. Expect dep from Rwy 23 R at Twy B intersection 11600' avbl, if full length rqr, request
    back-taxi from twr. Standard RSRS applied. AFRC 445 AW opr Mon-Fri and training weekend 1200-0330Z‡.
  COMMUNICATIONS: ATIS 124.475 269.9 PTD 122.85 372.2
 (R) DAYTON APP CON 126.5 327.1 (091°-180°) 118.85 127.225
    PATTERSON TOWER 126.9 281.45 GND CON 121.8 335.8
 (R) DAYTON DEP CON 126.5 327.1 (091°-180°)
    445A W AFRC COMD POST (BUCKEYE CON) 349.4 PMSV METRO 344.6 (Tran aircrews ctc 15th OWS for weather
      briefing DSN 576-9755, C618-256-9755. Reported prevailing visibility may not represent entire afld due to
      obstruction from observation point; observation point obstruction from 050°-210°. Touchdown visibility not
      obstruction. ATC will enhance sfc observation when visibility less than 4 SM and different from reported
      visibility.)
  AIRSPACE: CLASS D syc continuous other times CLASS E
  RADIO AIDS TO NAVIGATION: NOTAM FILE FFO.
    SPRINGFIELD (T) VORW/DME 113.2 SGH Chan 79 N39°50.19′ W83°50.70′ 270° 9.3 NM to fld. 1047/4W.
                               FFO (115.2) N39°49.14′ W84°03.33′ at fld. 804/4W.
    PATTERSON (T) TACAN Chan 99
    ILS 109.7
                 I-FAE
                         Rwy 05L. Glids slope not avbl.
    IIS 109 7
                 I-FFO
                         Rwv 23R.
  COMM/NAV/WEATHER REMARKS: ILS Rwy 05L and 23R opr on same frequency 109.7, but different ident (I-FAE, I-FFO).
    Positive ident of ILS prior to flying apch.
WYANDOT CO
               (See UPPER SANDUSKY)
WYNKOOP
            (See MOUNT VERNON)
YELLOW BUD N39°31.61′ W82°58.68′
                                         NOTAM FILE DAY
                                                                                                       CINCINNATI
  (T) VOR 112.5 XUB at Pickaway Co Meml.
                                                                                                           L-29A
  RCO 122.1R 112.5T (DAYTON RADIO)
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AF (AFRC) 8 NE UTC-5(-4DT) N39°49.56′ W84°02.77′ CHICAGO

H-10G I-27F

ΠΙΔΡ ΔΠ

Not insp

PCN 67 R/B/W/T HIRL

#### YOUNGSTOWN

LANSDOWNE (Ø4G) 2 NE UTC-5(-4DT) N41°07.83′ W80°37.18′

1044 NOTAM FILE CLE

DETROIT L-30H ΙΔΡ

RWY 02-20: H3073X50 (ASPH) S-7.5 0.9% up N

RWY 02: Trees. RWY 20: Trees.

AIRPORT REMARKS: Unattended. Arpt CLOSED indef. Rwy 02-20 vegetation in cracks, last 500' Rwy 12 depressions in pavement. Ramp in poor condition; breaking pavement.

WEATHER DATA SOURCES: HIWAS 109.0 YNG.

COMMUNICATIONS: CTAF/UNICOM 122.8

R YOUNGSTOWN APP/DEP CON 133.95 (1100-0500Z‡)

(0500-1100Z‡)

RADIO AIDS TO NAVIGATION: NOTAM FILE YNG.

YOUNGSTOWN (L) VORTAC 109.0 YNC Chan 27 N41°19.86′ W80°40.48′ 173° 12.3 NM to fld. 1160/5W.

HUBBARD NDB (MHW) 408 HBD N41°09.17′ W80°31.89′ 259° 4.2 NM to fld. NOTAM FILE CLE. \_\_\_\_\_\_

YOUNGSTOWN ELSER METRO (4G4) 7 SW UTC-5(-4DT) N40°57.71′ W80°40.64′

1070 B S4 FUEL 100LL, JET A OX 1, 2 NOTAM FILE CLE

DETROIT L-30H

IAP

RWY 10-28: H4012X50 (ASPH) MIRL 1.4% up E

RWY 10: REIL. PAPI(P2L). Thid dsplcd 348'. Trees. RWY 28: REIL. PAPI(P2L)—GA 3.75°. Thid dspicd 260'. Trees.

AIRPORT REMARKS: Attended 1300-dusk. Twr 1085' AGL (2118' MSL) 7.5 NM NNE. Rwy 28 PAPI OTS indef.

WEATHER DATA SOURCES: HIWAS 109.0 YNG.

COMMUNICATIONS: CTAF/UNICOM 123.05

(R) AKRON-CANTON APP/DEP CON 125.5 (1100-0500Z‡)

**CLNC DEL** 119.25

(0500-1100Z‡)

RADIO AIDS TO NAVIGATION: NOTAM FILE CAK. AKRON (L) VOR/DME 114.4 ACO Chan 91 N41°06.47'

W81°12.09' 114° 25.4 NM to fld. 1194/4W.

3 €3 €3 a €3 €3

#### YOUNGSTOWN/WARREN

NOTAM FILE YNG

YOUNGSTOWN-WARREN RGNL (YNG) 10 N UTC-5(-4DT) N41°15.64′ W80°40.75′ 1192 B S4 FUEL 100LL, JET A OX 1, 2, 3, 4 ARFF Index—See Remarks

DETROIT H-10g, L-30h IAP, AD

DETROIT

L-29B

RWY 14-32: H9003X150 (ASPH-GRVD) S-140, D-209, ST-175, DT-340, DDT-600 HIRL

RWY 14: MALSR. PAPI(P4L)-GA 3.0° TCH 57'. 0.9% up.

RWY 32: MALSR. PAPI(P4L)—GA 3.0° TCH 40'. Trees. 0.8% down

**RWY 05–23**: H5002X150 (ASPH–GRVD) S–138, D–175, ST–175,

DT-280 MIRL 1.4% up NE

RWY 05: REIL. VASI(V4L)—GA 3.25° TCH 51'. Trees.

RWY 23: REIL. PAPI(P4R)—GA 3.0° TCH 24'.

RWY 143-323: H3500X60 (ASPH) 111 F/A/W/T

#### RUNWAY DECLARED DISTANCE INFORMATION

RWY 05: TORA-5002 TODA-5002 ASDA-5002 LDA-5002 RWY 14: TORA-9003 TODA-9003 ASDA-9003 LDA-9003 RWY 23: TORA-5002 TODA-5002 ASDA-5002 LDA-5002

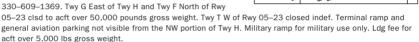
 RWY 23:
 TORA-5002
 TODA-5002
 ASDA-5002
 LDA-5002

 RWY 32:
 TORA-9003
 TODA-9003
 ASDA-9003
 LDA-9003

 RWY 143:
 TORA-3500
 TODA-3500
 ASDA-3500
 LDA-3500

RWY 323: TORA-3500 TODA-3500 ASDA-3500 LDA-3500

AIRPORT REMARKS: Attended continuously. Deer and bird haz. All military acft ctc Vader ops for bird watch condition. Rwy 143–323 used as a military assault strip. Hold short signs Twy H1 OTS until further notice. Class I, ARFF Index B. PPR for ARFF Index D call



WEATHER DATA SOURCES: ASOS (330) 856-9357. HIWAS 109.0 YNG.

COMMUNICATIONS: ATIS 123.75 UNICOM 122.95

RCO 122.2 122.1R 109.0T (CLEVELAND RADIO)

(R) APP/DEP CON 133.95 127.15 (1100-0500Z‡)

(0500-1100Z‡)

TOWER 119.5 GND CON 121.9 CLNC DEL 118.25

AIRSPACE: TRSA svc ctc APP CON within 20 NM.

RADIO AIDS TO NAVIGATION: NOTAM FILE YNG.

(L) VORTAC 109.0 YNG Chan 27 N41°19.86′ W80°40.48′ 188° 4.2 NM to fld. 1160/5W. HIWAS. VOR unusable  $015^{\circ}$ –179° blo 5000′ and  $180^{\circ}$ –014° byd 25 NM blo 5000′.

FETCH NDB (LOM) 338 YN N41°12.03′ W80°35.77′ 322° 5.2 NM to fld. Unmonitored. LOM unusable byd 10 NM.

ILS 110.1 I-YNG Rwy 32. Class IA. LOM FETCH NDB. NDB unmonitored. LOM unusable byd 10 NM. ILS 110.1 I-MOK Rwy 14. Class IA. OM unmonitored.

ASR (1100-0500Z‡)

#### ZANESVILLE

PARR (42I) 5 N UTC-5(-4DT) N40°00.42′ W82°00.74′

790 S4 FUEL 80. 100LL NOTAM FILE CLE

RWY 10-28: H3100X26 (ASPH) S-10 LIRL

RWY 10: Trees. RWY 28: Thid dsplcd 61'. Trees. Rgt tfc.

AIRPORT REMARKS: Attended 1400Z‡-dark, holidays 1700Z‡-dark. For LIRL Rwy 10–28 key 122.8 five times on; eight times slowly to deactivate. Rwy 10–28 NSTD LIRL.

COMMUNICATIONS: CTAF/UNICOM 122.8

RADIO AIDS TO NAVIGATION: NOTAM FILE ZZV.

ZANESVILLE (L) VOR/DME 111.4 ZZV Chan 51 N39°56.45′ W81°53.56′ 312° 6.8 NM to fld. 900/6W.

**ZANESVILLE MUNI** (ZZV) 5 E UTC-5(-4DT) N39°56.67′ W81°53.53′

900 B S4 **FUEL** 80, 100LL, JET A1 + 0X 4 TPA—1900(1000) NOTAM FILE ZZV **RWY 04-22**: H5000X150 (ASPH-CONC) S-38, D-50, DT-75 HIRL 0.5% up SW

CINCINNATI H-10G, L-29B

RWY 04: REIL. PAPI(P4R)—GA 3.0° TCH 35'. Trees.

RWY 22: REIL. PAPI(P4L).

RWY 16-34: H4999X150 (ASPH-CONC) S-38, D-50,

DT-75 MIRL 0.6% up SE

RWY 16: REIL. Trees. RWY 34: REIL. PAPI(P4L). Trees.

AIRPORT REMARKS: Attended Mon-Fri 1200-0100Z‡, Sat-Sun

INFURI REMARKS: Attended Mon-FrI 1200-010024, Sat-Sun 1300-230024. Deer and birds on and invof arpt. Rwy 16-34 rwy cracking. Acft not visible from end to end. Twy A Igts OTS indef. HIRL Rwy 04-22, MIRL Rwy 16-34, REIL Rwy 04, Rwy 22, Rwy 16 and Rwy 34 NSTD pilot controlled, ACTIVATE—CTAF, 5 clicks on, 7 clicks off. Rotating bcn OTS indef. Rwy 04-22 and Rwy 16-34 are concrete with asphalt overlays. Rwy 16-34 75 ft new overlay in center sides are poor.

WEATHER DATA SOURCES: ASOS 111.4 ZZV (740) 453-8139.

COMMUNICATIONS: CTAF/UNICOM 123.0

RCO 122.1R 111.4T (CLEVELAND RADIO)

RCO 122.5 122.2 (CLEVELAND RADIO)

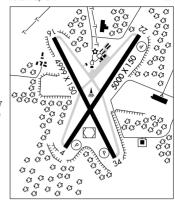
INDIANAPOLIS CENTER APP/DEP CON 124.45

 $\textbf{RADIO AIDS TO NAVIGATION:} \ \ \text{NOTAM FILE ZZV}.$ 

(L) VOR/DME 111.4 ZZV Chan 51 N39°56.45′ W81°53.56′ at fld. 900/6W. ASOS.

NDB (MHW) 204 HRA N39°54.38′ W81°55.16′ 035° 2.6 NM to fld. Unmonitored. NDB OTS indef. SHUTDOWN.

ILS/DME 109.95 I-TNF Chan 36(Y) Rwy 22. Unmonitored.



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#### MODEL ROCKET ACTIVITY IN ILLINOIS

#### Hillsboro Municipal Airport (3K4), Hillsboro, IL

Model Rocket activity will be conducted within a 2 NM radius of the VLA273011, SFC to 8,000 Feet MSL, SR-SS. For further information contact Flight Services at 1-800-WX-BRIEF (992-7433).

#### Tuscola Airport (K96), Tuscola, IL

Model Rocket activity will be conducted within a 2 NM radius of Tuscola Airport (K96), SFC to 10,000 feet MSL, SR-SS. For further information contact Flight Services at 1–800–WX–BRIEF (992–7433).

## AEROBATIC PRACTICE AREAS IN ILLINOIS Litchfield Municipal Airport (3LF), Litchfield, IL

Aerobatic practice will be conducted within 2 NM radius of Litchfield Municipal Airport (3LF), from 1,700 feet MSL to 4,200 feet MSL. The practice area is for waiver holders only. Pilots should use caution when opr within this area. For further information contact Flight Services at 1–800–WX–BRIEF (992–7433).

#### Smith Airport (LL27), Macomb, IL

Aerobatic practice will be conducted within 2 NM radius of Smith Airport (LL27), SFC to 4,100 feet MSL, SR-SS. For further information contact Flight Services at 1–800–WX–BRIEF (992–7433).

#### Williamson County Regional Airport (MWA), Marion, IL

Aerobatic practice will be conducted within 1 NM radius of Williamson County Regional Airport (MWA), SFC to 5,000 feet MSL, SR-SS. For further information contact Flight Services at 1–800–WX–BRIEF (992-7433).

#### Pinckneyville-DuQuoin Airport (PJY), Pinckneyville, IL

Aerobatic practice will be conducted within 2 NM radius of Pinckneyville–DuQuoin Airport (PJY), SFC to 3,900 feet MSL, SR-SS. For further information contact Flight Services at 1–800–WX–BRIEF (992–7433).

#### Springfield IL, Abraham Lincoln Capital Airport (SPI)

Aerobatic practice will be conducted within 1.5 NM radius of Springfield VOR SPI160010, from 2,100 feet MSL to 4,600 feet MSL, SR-SS. For further information contact Flight Services at 1–800–WX-BRIEF (992–7433).

### AEROBATIC PRACTICE AREA

#### Norris Field (8II2), Richmond, IN

Aerobatic Flight Activity will be conducted within 1 (one) NM radius of the Richmond (RID) VORTAC 193R/6 DME. Flights will occur from 800' AGL to 3,500' AGL. Pilots should use caution when operating within this area. For further information, Contact Dayton APP CON at 1–937–454–7310 or freq. 134.45.

#### **AEROBATIC PRACTICE AREA**

#### Skyway Estates Airport (60G), Eaton Rapids, MI

Aerobatic Flight Activity will be conducted within a 1 (one) NM radius of the Lansing (LAN) VORTAC 171R/8DME. Flights will occur from SR to SS from 2,500 MSL to 6,000 MSL.

Pilots should use caution when operating within this area. For further information, contact Lansing ATCT at 1-517-321-1355 or freq. 119.9.

#### Search Light Activity Dayton, OH

Search light activity will be conducted at the Dayton Schuster Performing Arts Center, Dayton, OH (FFO VORTAC 241/7.23, Lat 39-45-39.56N, Lon 084-11-32.94W) at and above 1500 MSL, from dusk until mildnight. Searchlight beams may be injurious to pilots/passengers eyes at 1500 MSL and above. Flash blindness or cockpit illumination may occur at greater distances, to several miles. For further information, contact Dayton AFSS at 937-454-8398.

### COMMUNICATIONS ADVISORIES Indianapolis ARTCC

#### NABB INDIANA AREA

New Hope, London, Lexington Kentucky Area

Indianpolis Center has installed frequencies in the southern portion of their airspace that require 720-channel radio capability.

Pilots should be aware that if they fly in the Nabb, IN, or the New Hope, London, and Lexington, KY, area without a 720-channel radio, ATC services will be greatly reduced. Traffic advisories, weather information, airport information, along with any other direct communication services will not be available.

While in this area of Indianapolis Center, pilots witout 720-channel capability will, in most cases, monitor Flight Service Stations. There will be a noticeable delay in all clearance activity. Please ensure that ATC has adequate lead time in the event of problems or clearance requirements.

#### INTERSECTION DEPARTURES DURING PERIOD OF DARKNESS CHICAGO O'HARE INTERNATIONAL AIRPORT (ORD) CHICAGO. ILLINOIS

Chicago O'Hare International Airport Traffic Control Tower has been granted a waiver to the guideline that prohibits the control tower from taxiing an aircraft into ''position and hold'' at an intersection, between sunset and sunrise.

This waiver allows the tower to taxi the aircraft into "position and hold" during period of darkness, at the intersections listed below.

Runway 10 at Taxiway 2H Runway 14L at Taxiway U2 Runway 14L at Taxiway V Runway 28 at Taxiway ZW Runway 28 at Taxiway ZV Runway 32L at Taxiway V Runway 32L at Taxiway M Runway 32L at Taxiway M

Aircraft shall not taxi into position and hold under the provisions of this waiver when the subject intersection is not visible from the tower unless the aircraft's position can be verified by the Airport Surface Detection Equipment (ASDE) prior to the issuance of a departure clearance. When the provisions of this waiver are being exercised, the affected runways shall be used for departures only, departures shall not be permitted from any point on the runway other than the intersections listed above, and only one aircraft at a time is permitted to taxi into position and hold on each respective runway.

#### INTERSECTION DEPARTURES DURING PERIOD OF DARKNESS INDIANAPOLIS INTERNATIONAL AIRPORT (IND) INDIANAPOLIS, INDIANA

Indianapolis International Airport Traffic Control Tower has been granted a waiver to the guideline that prohibits the control tower from taxiing an aircraft into "position and hold" at an intersection, between sunset and sunrise.

This waiver allows the tower to taxi the aircraft into "position and hold" during period of darkness, at the intersections listed below.

Runway 23L at Taxiways "C2" and "D2" Runway 23R at Taxiways "A2" and "B2"

Aircraft shall not taxi into position and hold under the provisions of this waiver when the subject intersection is not visible from the tower. When the provisions of this waiver are being exercised, the affected runways shall be used for departures only. Intersection departures will continue to be utilized at other locations between sunset and sunrise. However, aircraft cannot be taxied into "position and hold" prior to takeoff clearance.

#### INTERSECTION DEPARTURES DURING PERIOD OF DARKNESS GENERAL MITCHELL INTERNATIONAL AIRPORT (MKE) MILWAUKEE, WISCONSIN

Milwaukee Mitchell International Airport Traffic Control Tower has been granted a waiver to the guideline that prohibits the control tower from taxiing an aircraft into "position and hold" at an intersection, between sunset and sunrise.

This waiver allows the tower to taxi the aircraft into "position and hold" during period of darkness, at the intersection listed below

#### Runway 19R at Taxiway Victor

Aircraft shall not taxi into position and hold under the provisions of this waiver when the subject intersection is not visible from the tower. When the provisions of this waiver are being exercised, the affected runway shall be used for departures only. Intersection departures will continue to be utilized at other locations between sunset and sunrise.

#### INTERSECTING RUNWAY OPERATIONS

### CHICAGO O'HARE INTERNATIONAL AIRPORT (ORD) CHICAGO, ILLINOIS

Chicago O'Hare International (ORD) Airport Traffic Control Tower (ATCT) has been authorized to conduct intersecting runway operations to Runway 28 and Runway 14R whereby an aircraft departing Runway 28 shall be through the intersection of Runway 14R prior to the arriving aircraft on Runway 14R reaching a point no closer than 5,000 feet from the intersection of both runways.

# SIMULTANEOUS OPPOSITE DIRECTION OPERATIONS CHICAGO O'HARE INTERNATIONAL AIRPORT (ORD) CHICAGO. ILLINOIS

Chicago O'Hare International (ORD) Airport Traffic Control Tower (ATCT) has been authorized to conduct arrivals to Runways 14L & 14R while conducting simultaneous opposite direction departures off of runways 09R & 28 during IFR weather conditions. ORD ATCT is authorized to conduct simultaneous converging instrument approaches to runways 14R & 22R while conducting simultaneous opposite direction departures off of runways 09R & 28 during IFR weather conditions.

#### SIMULTANEOUS ILS APPROACHES WITH ONE GLIDE SLOPE OUT OF SERVICE CHICAGO O'HARE INTERNATIONAL AIRPORT (ORD) CHICAGO. ILLINOIS

Chicago O'Hare International Airport Traffic Control Tower and Chicago TRACON have been authorized to conduct independent simultaneous ILS approaches with the glide slope of one parallel runway inoperative.

# ILS PRM (SIMULTANEOUS CLOSE PARALLEL) PROCEDURE FOR PILOTS FILING FLIGHT PLANS TO CLEVELAND-HOPKINS INTERNATIONAL (CLE)

Effective Thursday, May 12, 2005. During the hours of 0700–2200 local, CLE ATCT may utilize ILS PRM and LDA PRM apchs to Runways 6L/6R as weather and arrival traffic demand dictate. Aircraft arriving from the west and north (primarily over ZABER and HIMEZ INT.) should expect ILS PRM Runway 6L, aircraft arriving from the east and south (primarily over CXR and KEATN INT.) should expect LDA PRM Runway 6R. If unable to participate in PRM apchs acft operators are required to contact FAA ATCSCC directly at 1–800–333–4286 or at 703–904–4452 prior to departure to obtain a pre-coordinated arrival time. Non-participating acft may encounter DLAS attributable to PRM flow. Pilot requirements and procedures are outlined in the U.S. Terminal Procedures Publications on the pages entitled Attention All Users of ILS Precision Runway Monitor (PRM) or LDA Precision Runway Monitor (PRM).

### SPECIAL NORTH ATLANTIC, CARIBBEAN AND PACIFIC AREA COMMUNICATIONS

VHF air-to-air frequencies enable aircraft engaged in flights over remote and oceanic areas out of range of VHF ground stations to exchange necessary operational information and to facilitate the resolution of operational problems.

Frequencies have been designated as follows:

North Atlantic area: 123.45 MHz
Caribbean area: 123.45 MHz
Pacific area: 123.45 MHz

#### CHICAGO, ILLINOIS CHICAGO O'HARE VOR/DME

DME unlocks can occur periodically due to ground station overload when more than 100 aircraft interrogations are received at the same time. The problem may occur when aircraft are being held in the Chicago (O'Hare) terminal area awaiting approach clearance at O'Hare. Possibilities of the problem occurring are reduced by users deactivating interrogators during nonuse or switching to an ILS DME whenever possible. Deactivating interrogators on the ground is especially important since nearby aircraft cause more overload than distant ones.

#### **MILITARY TRAINING ROUTES**

The DOD Flight Information Publication AP/1B provides textual and graphic descriptions and operating instructions for all military training routes (IR, VR, SR) and refueling tracks/anchors. Complete and more comprehensive information relative to policy and procedures for IRs and VRs is published in FAA Handbook 7610.4 (Special Military Operations) which is agreed to by the DOD and therefore directive for all military flight operations. The AP/1B is the official source of route data for military users.

#### **CIVIL USE OF MILITARY FIELDS**

U.S. Army, Air Force, Navy and Coast Guard Fields are open to civil fliers only in emergency or with prior permission. Army installations, prior permission is required from the Commanding Officer of the installation.

For Air Force installations, prior permission should be requested at least 30 days prior to first intended landing from either Headquarters USAF (PRPOC) or the Commander of the installation concerned (who has authority to approve landing rights for certain categories of civil aircraft). For use of more than one Air Force installation, requests should be forwarded direct to Hq USAF (PRPOC), Washington, D.C. 20330.

Use of USAF installations must be specifically justified.

For Navy and Marine Corps installations, prior permission should be requested at least 30 days prior to first intended landing.

An Aviation Facility License must be approved and executed by the Navy prior to any landing by civil aircraft.

Forms and further information may be obtained from the U.S.Navy or Marine Corps aviation activity.

For Coast Guard fields prior permission should be requested from the Commandant, U.S. Coast Guard via the Commanding Officer of the field.

When instrument approaches are conducted by civil aircraft at military airports, they shall be conducted in accordance with the procedures and minimums approved by the military agency having jurisdiction over the airport.

#### AIRCRAFT LANDING RESTRICTIONS

Landing of aircraft at locations other than public use airports may be a violation of Federal or local law. All land and water areas are owned or controlled by private individuals or organizations, states, cities, local governments, or U.S. Government agencies. Except in emergency, prior permission should be obtained before landing at any location that is not a designated public use airport or seaplane base.

Landing of aircraft is prohibited on lands and waters administered by the National Park Service, U.S. Fish and Wildlife Service, U.S. Forest Service, and on many areas controlled by the U.S. Army Corps of Engineers, unless prior authorization is obtained from the respective agency.

#### **CONTINUOUS POWER FACILITIES**

In order to insure that a basic ATC system remains in operation despite an areawide or catastrophic commercial power failure, key equipment and certain airports have been designated to provide a network of facilities whose operational capability can be utilized independent of any commercial power supply.

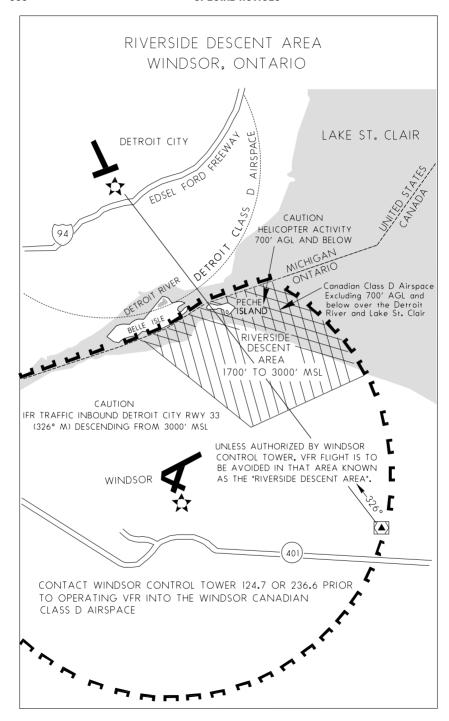
In addition to those facilities comprising the basic ATC system, the following approach and lighting aids have been included in this program for a selected runway.

- 1. ILS (Localizer, Glide Slope, COMLO, Inner, Middle and Outer Markers)
- 2. Wind Measuring Capability
- 3. Approach Light System (ALS) or Short ALS (SALS)
- 4. Ceiling Measuring Capability
- 5. Touchdown Zone Lighting (TDZL)
- 6. Centerline Lighting (CL)
- 7. Runway Visual Range (RVR)
- 8. High Intensity Runway Lighting (HIRL)
- 9. Taxiway Lighting
- 10. Apron Light (Perimeter Only)

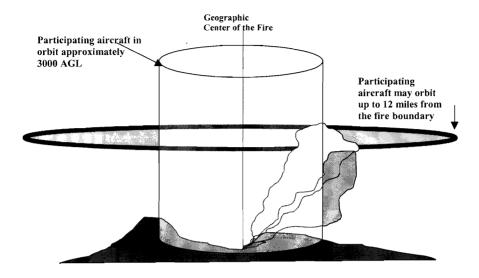
The following have been designated "Continuous Power Airports," and have independent back up capability for the equipment installed.

Airport/Ident	Runway No.	Airport/Ident	Runway No.
Albuquerque, NM (ABQ)	08	Milwaukee, WI (MKE)	01L
Anchorage, AK (ANC)	07R	Minneapolis, MN (MSP)	30L
Andrews AFB, MD (ADW)	01L	Nashville, TN (BNA)	02L
Atlanta, GA (ATL)	09R	New Orleans, LA (MSY)	10
Baltimore, MD (BWI)	10	New York, NY (JFK)	04R
Bismarck, ND (BIS)	31	New York, NY (LGA)	22
Boise, ID (BOI)	10R	Newark, NJ (EWR)	04R
Boston, MA (BOS)	04R	Oklahoma City, OK (OKC)	35R
Charlotte, NC (CLT)	36L	Omaha, NE (OMA))	14R
Chicago, IL (ORD)	14R	Ontario, CA (ONT)	26L
Cincinnati, OH (CVG)	36C	Philadelphia, PA (PHL)	09R
Cleveland, OH (CLE)	06R	Phoenix, AZ (PHX)	80
Dallas/Fort Worth, TX (DFW)	17C	Pittsburgh, PA (PIT)	10L
Denver, CO (DEN)	35R	Reno, NV (RNO)	16R
Des Moines, IA (DSM)	31	Salt Lake City, UT (SLC)	34L
Detroit, MI (DTW)	03R	San Antonio, TX (SAT)	12R
El Paso, TX (ELP)	22	San Diego, CA (SAN)	09
Fairbanks, AK (FAI)	01L	San Francisco, CA (SFO)	28R
Great Falls, MT (GTF)	03	San Juan, PR (SJU)	08
Honolulu, HI (HNL)	08L	Seattle, WA (SEA)	16C
Houston, TX (IAH)	26L	St. Louis, MO (STL)	30R
Indianapolis, IN (IND)	05L	Tampa, FL (TPA))	36L
Jacksonville, FL (JAX)	07	Tulsa, OK (TUL)	36R
Kansas City, MO (MCI)	19R	Washington, DC (DCA)	01
Los Angeles, CA (LAX)	24R	Washington, DC (IAD)	01R
Memphis, TN (MEM)	36L	Wichita, KS (ICT)	01L
Miami, FL (MIA)	08R		

NOTE—The existing CPA runway is listed. Pending and future changes at some locations will require a revised runway designation.



#### **FIREFIGHTING TRAFFIC AREAS**



Pilots are advised to stay clear of Firefighting Traffic Areas. Remain 15 miles from the area of activity. If you must over-fly the area, do so at an altitude of 5000 feet AGL above. However, to remain safe and out of the way of working aircraft, it is best to circumnavigate the area.

The wild-land fire environment can be very complex and involve a large number and variety of aircraft types including fixed and rotary wing aircraft. Some of the aircraft are small single and multi-engine command and control platforms that can be especially difficult to see and may give the appearance that the fire is not staffed. The aircraft participating in firefighting can orbit as far out as 12 miles from the perimeter of the fire. Any intrusion by aircraft not directly involved in the firefighting operation could delay the delivery of much needed retardant or water to ground firefighters and will adversely affect the safety of participating aircraft. Please stay well away from wild-land fires even if you feel that aircraft are not working the fire; they may be en route or unseen.

If you see a fire developing along your route, report it immediately to air traffic control who will advise the US Forest Service. The firefighting community would welcome this information.

The following narratives summarize the FAR Part 93 Special Air Traffic Rules, and Airport Traffic Patterns in effect as prescribed in the rule. This information is advisory in nature and in no way relieves the pilot from compliance with the specific rules set forth in FAR Parts 91 and 93.

Special Airport Traffic Areas prescribed in Part 93 are depicted on Sectional Aeronautical Charts, World Aeronautical Charts, Enroute Low Altitude Charts, and where applicable, on VFR Terminal Area Charts.

### LORAIN (ELYRIA), OHIO LORAIN COUNTY AIRPORT TRAFFIC RULE

Part 93, Subpart J, requires each person piloting an airplane landing at the Lorain County Rgnl Airport shall enter the traffic pattern north of the airport and shall execute a right traffic pattern for a landing to the southwest or a left traffic pattern for a landing to the northeast. Each person taking off from the airport shall execute departure turn to the north as soon as practicable after takeoff.

#### OPERATIONS RESERVATIONS FOR HIGH DENSITY TRAFFIC AIRPORTS KENNEDY, LAGUARDIA, AND WASHINGTON REAGAN NATIONAL

The Federal Aviation Administration (FAA) has designated New York's Kennedy and LaGuardia Airports and Washington Reagan National Airport as High Density Traffic Airports (HDTA), Title 14, Code of Federal Regulations, part 93, subpart K, and has prescribed air traffic rules and requirements for operating aircraft (excluding helicopters) to and from those airports during certain hours.

Reservations are required for operations from 6 a.m. through 11:59 p.m. local time at LaGuardia Airport and Washington Reagan National Airport. Reservations at Kennedy Airport are required from 3 p.m. through 7:59 p.m. local time.

Reservation procedures are detailed in Advisory Circular 93–1, Reservations for Unscheduled Operations at High Density Traffic Airports. A copy of the advisory circular is available on the FAA website at <a href="http://www.faa.gov">http://www.faa.gov</a>. Reservations for unscheduled operations are allocated through the Enhanced Computer Voice Reservation System (e-CVRS) accessible via telephone or the Internet. This system may not be used to make reservations for scheduled air carrier or commuter flights.

The toll–free telephone number for accessing e–CVRS is 1–800–875–9694 and is available for calls originating within the United States, Canada, and the Caribbean. Users outside the toll–free areas may access e–CVRS by calling the toll number of 703–707–0568. The Internet web address for accessing the e–CVRS is <a href="http://www.fly.faa.gov/ecvrs">http://www.fly.faa.gov/ecvrs</a>. If you have any questions about reservation requirements or are experiencing problems with the system, you may telephone the Airport Reservation Office at the Air Traffic Control System Command Center at (703) 904–4452.

Requests for instrument flight rules (IFR) reservations will be accepted beginning 72 hours prior to the proposed time of operation at the high-density airport. For example, a request for an 11 a.m. reservation on a Thursday will be accepted beginning at 11 a.m. on the previous Monday.

IFR reservations must be obtained prior to IFR landing or takeoff at an HDTA during slot controlled hours. An air traffic control (ATC) clearance does not constitute a reservation. A reservation does not constitute permission to operate at an HDTA if additional operational limits or procedures are required by NOTAM and/or regulation.

Aircraft involved in medical emergencies will be handled by ATC without regard to a reservation after obtaining prior approval of the ATC System Command Center on (703) 904–4452. ATC will accommodate declared other emergency situations without regard to slot reservations.

NOTE: Visual flight rule (VFR) reservations via ATC for unscheduled operations at LaGuardia are not authorized from 7 a.m. through 8:59 a.m. local time and 4 p.m. through 6:59 p.m. local time, Monday through Friday and Sunday evenings, unless otherwise announced by NOTAM. Both IFR and VFR operations during those time periods must obtain an advance reservation through e–CVRS.

#### FSS Telephone numbers

Flight Service Station (FSS) facilities provide flight planning and weather briefing services to pilots. FSS services in the contiguous United States, Hawaii and Puerto Rico, are provided by a network of large hub facilities and smaller remote facilities which are interconnected with the hubs.

<u>Selected remote FSS</u> facilities across the contiguous United States have variable part—time operating hours. Because of the interconnectivity between remote and hub facilities, all FSS services are available continuously using published telephone numbers and radio frequencies.

#### EAST CENTRAL U.S.

ILLINOIS: Kankakee, Greater Kankakee (IKK)-IKK FSS

MICHIGAN: Lansing, Capital City (LAN)-LAN FSS

Telephone Information Briefing Service (TIBS) is the FSS service that provides continuous recordings of meteorological and/or aeronautical information including area and/or route briefings, airspace procedures and special announcements. A touch-tone telephone is required to fully utilize this service.

Further information can be found in the Aeronautical Information Manual (AIM).

#### NATIONAL FSS TELEPHONE NUMBER

#### OTHER FSS TELEPHONE NUMBERS (except in Alaska)

TIBS (see description above)	1-800-4TIBS-WX (1-877-484-2799)
Clearance Delivery Only	1-888-766-8267
Lifeguard Flights Only	1-877-LIF-GRD3 (1-877-543-4733)
Flights within DC SFRA & FRZ *	1-866-225-7410

<sup>\*</sup> District of Columbia Special Flight Rules Area & Flight Restricted Zone

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# KEY to AERODROME FORECAST (TAF) and AVIATION ROUTINE WEATHER REPORT (METAR)

TAF KPIT 091730Z 091818 15005KT 5SM HZ.FEW020 WS010/31022KT FM1930 30015G25KT 3SM SHRA OVC015 TEMPO 2022 1/2SM +TSRA OVC008CB

FM0100 27008KT 5SM SHRA BKN020 OVC040 PROB40 0407 1SM -RA BR FM1015 18005KT 6SM -SHRA OVC020 BECMG 1315 P6SM NSW SKC

METAR KPIT 091955Z COR 22015G25KT 3/4SM R28L/2600FT TSRA OVC010CB 18/16 A2992 RMK SLP045 T01820159

Forecast	Explanation	Report
TAF	Message type: <u>TAF-routine or TAF AMD-amended forecast, METAR-hourly, SPECI-special or TESTM-non-commissioned ASOS report</u>	METAR
KPIT	ICAO location indicator	KPIT
091730Z	Issuance time: ALL times in UTC "Z", 2-digit date, 4-digit time	091955 <b>Z</b>
091818	Valid period: 2-digit date, 2-digit beginning, 2-digit ending times	
	In U.S. <b>METAR</b> : <u>COR</u> rected ob; or <u>AUTO</u> mated ob for automated report with no human intervention; omitted when observer logs on	COR
15005KT	Wind: 3 digit true-north direction, nearest 10 degrees (or <u>VaRiaBle</u> ); next 2-3 digits for speed and unit, <u>KT</u> (KMH or MPS); as needed, <u>G</u> ust and maximum speed; 00000KT for calm; for <b>METAR</b> , if direction varies 60 degrees or more, <u>V</u> ariability appended, e.g. 180 <u>V</u> 260	22015G25KT
5SM	Prevailing visibility: in U.S., Statute Miles & fractions; above 6 miles in TAF Plus6SM. (Or, 4-digit minimum visibility in meters and as required, lowest value with direction)	3/4SM
	Runway Visual Range: R; 2-digit runway designator Left, Center, or Right as needed; "/"; Minus or Plus in U.S., 4-digit value, FeeT in U.S., (usually meters elsewhere); 4-digit value Variability 4-digit value (and tendency Down, Up or No change)	R28L/2600FT
HZ	Significant present, forecast and recent weather: see table (on back)	TSRA
FEW020	Cloud amount, height and type: SKy Clear 0/8, FEW >0/8-2/8, SCaTtered 3/8-4/8, BroKeN 5/8-7/8, OVerCast 8/8; 3-digit height in hundreds of ft; Towering CUmulus or CumulonimBus in METAR; in TAF, only CB. Vertical Visibility for obscured sky and height "VV004". More than 1 layer may be reported or forecast. In automated METAR reports only, CLeaR for "clear below 12,000 feet"	OVC010CB
	Temperature: degrees Celsius; first 2 digits, temperature "/" last 2 digits, dew-point temperature; Minus for below zero, e.g., M06	18/16
	Altimeter setting: indicator and 4 digits; in U.S., A-inches and hundredths; (Q-hectoPascals, e.g., Q1013)	A2992

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### KEY to AERODROME FORECAST (TAF) and **AVIATION ROUTINE WEATHER REPORT** (METAR)

Forecast	Explanation	Report
WS010/31022KT	In U.S. <b>TAF</b> , non-convective low-level (≤2,000 ft) <u>Wind Shear;</u> 3-digit height (hundreds of ft); "/"; 3-digit wind direction and 2-3 digit wind speed above the indicated height, and unit, <u>KT</u>	
	In METAR, ReMarK indicator & remarks. For example: Sea-Level Pressure in hectoPascals & tenths, as shown: 1004.5 hPa; Temp/dew-point in tenths °C, as shown: temp. 18.2°C, dew-point 15.9°C	RMK SLP045 T01820159
FM1930	<u>FroM</u> and 2-digit hour and 2-digit minute <b>beginning</b> time: indicates significant change. Each FM starts on new line, indented 5 spaces.	
TEMPO 2022	TEMPOrary: changes expected for < 1 hour and in total, < half of 2-digit hour <b>beginning</b> and 2-digit hour <b>ending</b> time period	
PROB40 0407	PROBability and 2-digit percent (30 or 40): probable condition during 2-digit hour <b>beginning</b> and 2-digit hour <b>ending</b> time period	
BECMG 1315	BECoMinG: change expected during 2-digit hour beginning and 2-digit hour ending time period	

Table of Significant Present, Forecast and Recent Weather - Grouped in categories and used in the order listed below; or as needed in TAF. No Significant Weather.

QUALIFIER							
Intens	Intensity or Proximity						
- L	- Light "no sign" Moderate + Heavy						
VC			erodrome; in U.S. M				
	observation; in	U.S.	TAF, 5 to 10SM fron	n ce	nter of runway comp	lex (	(elsewhere within 8000m)
Descr	riptor						
MI	Shallow	BC	Patches	PR	Partial	TŞ	Thunderstorm
BL	Blowing	SH	Showers	DR	Drifting	FΖ	Freezing
WEA	THER PHEN	OME	NA				
Preci	pitation						
DZ	Drizzle		Rain	SN	Snow	SG	Snow grains
					Hail	GS	Small hail/snow pellets
	UP Unknown precipitation in automated observations						
Obsc	Obscuration						
	Mist (≥5/8SM)		Fog (<5/8SM)		Smoke	VA	Volcanic ash
SA	Sand	ΗZ	Haze	PΥ	Spray	DU	Widespread dust
Other							
	- 1	SS	Sandstorm	DS	Duststorm	PO	Well developed
FC_	Funnel cloud	+FC	tornado/waterspout	<u> </u>			dust/sand whirls

- Explanations in parentheses "()" indicate different worldwide practices.

- Ceiling is not specified; defined as the lowest broken or overcast layer, or the vertical visibility.

  NWS TAFs exclude turbulence, icing & temperature forecasts; NWS METARs exclude trend fosts

  Although not used in US, Ceiling And Visibility OK replaces visibility, weather and clouds if: visibility ≥10 km; no cloud below 5000 ft (1500 m) or below the highest minimum sector altitude, whichever is greater and no CB; and no precipitation, TS, DS, SS, MIFG, DRDU, DRSA or DRSN.

UNITED STATES DEPARTMENT OF COMMERCE

NOAA/PA 96052 National Oceanic and Atmospheric Administration—National Weather Service

#### FAA AND NWS KEY AIR TRAFFIC FACILITIES

#### **Air Traffic Control System Command Center**

Main Number......703–904–4400

RGNL AIR TRAFFIC DIVISIONS				
REGION TELEPHONE				
Alaskan	907-271-5464			
Central	816-329-2500			
Eastern	718-553-4502			
Great Lakes	847-294-7202			
New England	781-238-7500			
Northwest Mountain	425-227-2500			
Southern	404-305-5500			
Southwest	817-222-5500			
Western Pacific	310-725-6500			

#### AIR ROUTE TRAFFIC CONTROL CENTERS (ARTCCs)

ARTCC NAME	*24 HR RGNL DUTY OFFICE TELEPHONE #	BUSINESS Hours	BUSINESS TELEPHONE #
Albuquerque	817-222-5006	7:30 a.m4:00 p.m.	505-856-4300
Anchorage	907-271-5936	7:30 a.m4:00 p.m.	907-269-1137
Atlanta	404-305-5180	7:30 a.m5:00 p.m.	770-210-7601
Boston	617-238-7001	7:30 a.m4:00 p.m.	603-879-6633
Chicago	847-294-8400	8:00 a.m4:00 p.m.	630-906-8221
Cleveland	847-294-8400	8:00 a.m4:00 p.m.	440-774-0310
Denver	425-227-1389	7:30 a.m4:00 p.m.	303-651-4100
Ft. Worth	817-222-5006	7:30 a.m4:00 p.m.	817-858-7300
Houston	817-222-5006	7:30 a.m4:00 p.m.	281-230-5300
Indianapolis	847-294-8400	8:00 a.m4:00 p.m.	317-247-2231
Jacksonville	404-305-5180	8:00 a.m4:30 p.m.	904-549-1501
Kansas City	816-329-3000	7:30 a.m4:00 p.m.	913-254-8500
Los Angeles	661-265-8200	7:30 a.m4:00 p.m.	661-265-8200
Memphis	404-305-5180	7:30 a.m4:00 p.m.	901-368-8103
Miami	404-305-5180	7:00 a.m3:30 p.m.	305-716-1500
Minneapolis	847-294-8400	8:00 a.m4:00 p.m.	651-463-5580
New York	718-995-5426	8:00 a.m4:40 p.m.	516-468-1001
Oakland	310-725-3300	6:30 a.m3:00 p.m.	510-745-3331
Salt Lake City	425-227-1389	7:30 a.m4:00 p.m.	801-320-2500
Seattle	425-227-1389	7:30 a.m4:00 p.m.	253-351-3500
Washington	718-995-5426	8:00 a.m4:30 p.m.	703-771-3401

#### MAJOR TERMINAL RADAR APPROACH CONTROLS (TRACONS)

TRACON NAME	*24 HR RGNL DUTY OFFICE TELEPHONE #	BUSINESS HOURS	BUSINESS TELEPHONE #
Atlanta	404-305-5180	7:00 a.m3:30 p.m.	404-669-1200
Chicago	847-294-8400	8:00 a.m4:00 p.m.	847-608-5509
Dallas/Ft. Worth	817-222-5006	7:30 a.m4:00 p.m.	972-615-2500
Denver	425-227-1389	7:30 a.m4:00 p.m.	303-342-1500
Houston	817-222-5006	7:30 a.m4:00 p.m.	281-230-8400
New York	718-995-5426	8:00 a.m4:30 p.m.	516-683-2901
Northern CA	310-725-3300	7:00 a.m3:30 p.m.	916-366-4001
Southern CA	310-725-3300	7:30 a.m4:00 p.m.	858-537-5800

<sup>\*</sup>Facilities can be contacted through the RgnI Duty Officer during non-business hours.

#### FAA AND NWS

#### **KEY AIR TRAFFIC FACILITIES**

#### **DAILY NAS REPORTABLE AIRPORTS**

	*24 HR RGNL		
AIRPORT	DUTY OFFICE	BUSINESS	BUSINESS
NAME	TELEPHONE #	HOURS	TELEPHONE #
Albuquerque Intl Sunport, NM	817-222-5006	8:00 a.m5:00 p.m.	505-842-4366
Andrews AFB, MD	718–995–5426	8:00 a.m4:30 p.m.	301–735–2380
Baltimore/Washington	740 005 5400		*** ***
Intl Thurgood Marshall, MD	718-995-5426	8:00 a.m4:30 p.m.	410-962-3555
Boston Logan Intl, MA	781–238–7001 617–238–7001	7:30 a.m4:00 p.m.	617–455–3100 203–627–3428
Bradley Intl, CT Burbank/Bob Hope, CA	310-725-3300	7:30 a.m4:00 p.m. 7:00 a.m5:30 p.m.	818-567-4806
Charlotte Douglas Intl, NC	404-305-5180	8:00 a.m.–4:30 p.m.	704–344–6487
Chicago Midway, IL	847-294-8400	8:00 a.m.–4:00 p.m.	773-884-3670
Chicago O'Hare Intl, IL	847-294-8400	8:00 a.m4:00 p.m.	773-601-7600
Cleveland Hopkins Intl, OH	847-294-8400	8:00 a.m4:00 p.m.	216-898-2020
Covington/Cincinnati, OH	708-294-7401	8:00 a.m4:30 p.m.	606-767-1006
Dallas/Ft. Worth Intl, TX	817-222-5006	8:30 a.m.–5:00 p.m.	972-615-2531
Dayton Cox Intl, OH	847-294-8400	7:30 a.m4:00 p.m.	937-454-7300
Denver Intl, CO	425-227-1389	7:30 a.m4:00 p.m.	303-342-1600
Detroit Metro, MI	847-294-8400	8:00 a.m4:00 p.m.	734-955-5000
Fairbanks Intl, AK	907-271-5936	7:30 a.m4:00 p.m.	907-474-0050
Fort Lauderdale Intl, FL	404-305-5180	7:00 a.m3:30 p.m.	305-356-7932
George Bush			
Intercontinental/Houston, TX	817-222-5006	7:30 a.m4:00 p.m.	713-230-8400
Hartsfield-Jackson Atlanta Intl, GA	404-305-5180	7:00 a.m3:30 p.m.	404-669-1200
Honolulu Intl, HI	310-643-3200	7:30 a.m4:00 p.m.	808-840-6100
Houston Hobby, TX	817-222-5006	8:00 a.m5:00 p.m.	713-847-1400
Indianapolis Intl, IN	847-294-8400	8:00 a.m4:00 p.m.	317-484-6600
Kahului/Maui, HI	310-643-3200	7:30 a.m4:00 p.m.	808-877-0725
Kansas City Intl, MO	816-329-3000	7:30 a.m4:00 p.m.	816-329-2700
Las Vegas McCarran, NV	310-725-3300	7:30 a.m4:00 p.m.	702–262–5978
Los Angeles Intl, CA	310-725-3300	7:00 a.m3:30 p.m.	310-342-4900
Memphis Intl, TN	404–305–5180	7:30 a.m4:00 p.m.	901–322–3350
Louis Armstrong New Orleans Intl, LA	817-222-5006	7:00 a.m4:30 p.m.	504-471-4300
Miami Intl, FL	404-305-5180	7:00 a.m4:00 p.m.	305-869-5400
Minneapolis/St. Paul, MN Nashville Intl, TN	847-294-8400 404-305-5180	8:00 a.m4:00p.m.	612-713-4000 615-781-5460
New York Kennedy Intl, NY	718-995-5426	7:00 a.m3:30 p.m. 8:00 a.m4:30 p.m.	718-656-0335
New York La Guardia, NY	718-995-5426	8:00 a.m.–4:30 p.m.	718-030-0333
Newark Liberty Intl, NJ	718-995-5426	8:00 a.m.–4:30 p.m.	973-645-3103
Norman Y. Mineta San Jose Intl, CA	310-643-3200	7:30 a.m4:00 p.m.	408-982-0750
Ontario Intl, CA	310-643-3200	7:30 a.m.–4:00 p.m.	909-983-7518
Orlando Intl, FL	404–305–5180	7:30 a.m.–5:00 p.m.	407-850-7000
Philadelphia Intl, PA	718-995-5426	8:00 a.m4:30 p.m.	215-492-4100
Phoenix Sky Harbor Intl, AZ	310-643-3200	7:30 a.m4:00 p.m.	602-379-4226
Pittsburgh Intl, PA	718-995-5426	8:00 a.m4:30 p.m.	412-269-9237
Portland Intl, OR	425-227-1389	7:30 a.m4:00 p.m.	503-493-7500
Raleigh-Durham, NC	404-305-5180	8:00 a.m4:30 p.m.	919-840-5544
Ronald Reagan Washington			
National, DC	718-995-5426	8:00 a.m4:30 p.m.	703-413-1535
Salt Lake City, UT	425-227-1389	7:30 a.m4:00 p.m.	801-325-9600
San Antonio Intl, TX	817-222-5006	8:00 a.m4:30 p.m.	210-805-5507
San Diego Lindbergh Intl, CA	310-725-3300	8:00 a.m4:30 p.m.	619-299-0677
San Francisco Intl, CA	310-643-3200	7:00 a.m3:30 p.m.	650-876-2883
San Juan Intl, PR	404–305–5180	7:30 a.m5:00 p.m.	809-253-8663
Seattle-Tacoma Intl, WA	425–227–1389	7:30 a.m4:00 p.m.	206-768-2900
St. Louis Lambert, MO	816-329-3000	7:30 a.m4:00 p.m.	314-890-1000
Tampa Intl, FL	404-305-5180	7:30 a.m4:00 p.m.	813-371-7700
Ted Stevens Anchorage Intl, AK	907-271-5936	7:30 a.m4:00 p.m.	907-271-2700
Teterboro, NJ	718-995-5426	8:00 a.m4:30 p.m.	201–288–1889
Washington Dulles Intl, DC West Palm Beach, FL	718–995–5426 404–305–5180	8:00 a.m4:30 p.m. 8:00 a.m4:30 p.m.	703–661–6031 407–683–1867
Westchester Co, NY	718-995-5426		914-948-6520
WESIGNESIEN CU, INT	110-990-0420	8:00 a.m4:30 p.m.	514-540-0020

<sup>\*</sup>Facilities can be contacted through the Rgnl Duty Officer during non-business hours.

Air Route Traffic Control Center frequencies and their remoted transmitter sites are listed below for the coverage of this volume. Bold face type indicates high altitude frequencies, light face type indicates low altitude frequencies. To insure unrestricted IFR operations within the high altitude enroute sectors, the use of 720 channel communications equipment (25 kHz channel spacing) is required.

#### **RCHICAGO CENTER** 127.8 125.2

H-2-5-10-12, L-12-27-28-31, A-1 (KZAU)

**Aurora -** 123.75

Burlington - 135.6 Chicago Heights - 132.95

Crown Point - 127.8

Danville - 135.75

Des Plaines - 133.2 128.65 120.35

**Downers Grove -** 135.75 127.6

**Dubuque - 127.775** 133.95 **125.225** 

Ft. Wayne - 126.325 119.85 Goshen - 133.9 135.9 127.55

Grand Rapids - 126.125 128.4

Hampshire - 134.2 133.35

Horicon - 135.55 132.75 132.225

Jones - 125.975 120.225

Kankakee - 132.5 120.125 118.225

**Lafayette -** 123.85

**Leroy -** 119.225

Lone Rock - 133.3

Maple Park - 127.075

Milford - 135.4 132.5 127.45 125.05 120.175

Milwaukee - 134.75 132.3 125.1

Moline - 135.825 118.75

Monee - 133.425

Muskegon - 132.27

Oshkosh - 132.1

Pullman - 128.5 Rockford - 120.375

Rossville 125.375 120.975

South Bend - 135.35

Volk Fld 125.05

#### **R**CLEVELAND CENTER

 $\hbox{H-2-5-10-11, L-27-28-29-30-31-32, A-2}$ 

(KZOB)

Algonac - 134.775 132.25 126.525 Belmont - 135.175 124.425 120.4

Carleton - 134.775 119.95

Chardon - 120.775

Detroit (North) - 120.075

Findlay - 135.1 127.675

Flint - 127.7 126.75

Holland - 135.775 121.175

Jackson - 134.65 127.3

Litchfield - 135.725 134.65 120.45

Mansfield - 134.9 133.375

Mt Hope - 120.6

Paris - 128.15 120.6 Saginaw - 133.525 127.7

Sandusky - 132.45 127.9 119.875 119.325

Waterville - 128.625

#### (R)INDIANAPOLIS CENTER - 133,425 132,775 128,375

125.55 124.525 119.55

Brookville - 135.8 135.125 120.575

Evansville - 132.525 128.3

Henryville - 134.275 133.05 124.775

London - 134.0 128.775 126.57 124.8 120.475

Marietta - 125.55

Merwyn - 135.575 134.7 123.925

Muncie - 120.65

New Hope - 124.625 121.175

Portsmouth - 135.575 124.225 120.275

Rosewood - 128.075

Terre Haute - 134.175 132.2

Winchester - 128.22 126.375 123.775

Zanesville - 133.775 132.825 125.075 124.45

#### (R)KANSAS CITY CENTER - 135.3

Decatur - 132.1 124.3

Effingham - 135.05 133.225 124.3

Kirksville - 134.625 132.6

Marion - 125.3

Mt Vernon - 132.875 127.7

Quincy - 135.525

St Charles - 125.9 121.25

St Louis - 128.1 127.225 125.5

Vandalia - 125.725

#### ®MINNEAPOLIS CENTER

Central Wisconsin - 124.4

Duluth - 134.675 134.55 134.55 127.9

Eau Claire - 133.75 125.3

Escanaba - 127.65

Farmington - 133.7

Flying Cloud - 133.7 121.05

Green Bay - 125.55

Havward - 126.45

**Houghton - 127.2** 

Iron Mountain - 133.45 121.25

Ironwood - 133.55

La Crosse - 128.6 118.85

Mosinee - 124.4

Pellston - 134.6 132.425

Princeton - 121.05

Rhinelander - 123.725 133.65

Rochester - 132.35 Saginaw - 118.05

Sawver - 119.1

Swinns Valley - 135.7 134.85

Traverse City - 132.9

White Cloud - 132.55 120.85

H-5-9-10-12, L-16-25-26-27-29 (KZID)

H-2-5-10-11, L-10-12-13-14-27-28-31

(KZMP)

H-5-6, L-10-15-16-27, A-2 (KZKC)

EC, 17 DEC 2009 to 11 FEB 2010

#### 348 FLIGHT SERVICE STATION COMMUNICATION FREQUENCIES

VHF frequencies available at Flight Service Stations and at their remote communication outlets (RCO's) are listed below for the coverage of this volume. Frequencies in bold type are available all altitudes but recommended for use FL180 and above. "T" indicates transmit only and "R" indicates receive only. RCO's available at NAVAID's are listed after the NAVAID name. RCO's not at NAVAID's are listed by name.

#### CLEVELAND AESS

AKRON VOR/DME 114.4T 122.1R
BELLAIRE VOR/DME 117.1T 122.1R
BEILGS VOR/DME 117.1T 122.1R
CHARDON VOR/DME 112.7T 122.1R
CLEVELAND RCO 122.1R 122.2 122.35
DRYER VOR/DME 113.6T 122.1R
FINDLAY VORTAC 108.2T 122.1R 122.2 122.65
JEFFERSON VOR/DME 115.2T 122.1R 122.6
NEWCOMERSTOWN VOR/DME 111.8T 122.1R
SANDUSKY VOR/DME 109.2T 122.1R
WATERVILLE VOR/DME 113.T1 122.1R
YOUNGSTOWN VORTAC 109.0T 122.1R 122.2

ZANESVILLE VOR/DME 111.4T 122.1R 122.2 122.5

#### **DAYTON AFSS**

ALLEN COUNTY VOR 108.4T 122.1R
ATHENS-ALBANY RCO 122.25
APPLETON VORTAC 116.7T 122.1R
CINCINNATI RCO 122.4
COLUMBUS RCO 122.2 122.3
DAYTON RCO 114.5T 122.1R 122.2 122.55
DAYTON VOR/DME 114.5T 122.1R
GALLIPOLIS RCO 121.65
HILLSBORO RCO 122.2
ROSEWOOD VORTAC 117.5T 122.1R
YELLOW BUD VOR 112.5T 122.1R

#### **GREEN BAY AFSS**

ASHLAND RCO 122.25

BLACK RIVER FALLS RCO 122.5

CHIPPEWA RCO 123.65

**DELLS VORTAC 117.0T 122.1R** 

EAU CLAIRE RCO 122.65 123.6

ESCANABA RCO 122.3

FALLS VOR/DME 110.0T 122.1R

FOND DU LAC RCO 122.5

GREEN BAY RCO 122.2 122.55

HANCOCK RCO 122.525 123.65

HAYWARD VOR/DME 113.4T 122.1R

IRON MOUNTAIN VOR/DME 111.2T 122.1R

IRONWOOD RCO 122.3

JANESVILLE VOR/DME 114.3T 122.1R

KENOSHA VOR/DME 109.2T 123.6R

LA CROSSE RCO 122.2 122.35

LONE ROCK RCO 122.35

MACKINAC ISLAND RCO 122.35

MADISON RCO 122.6

MARSHFIELD RCO 122.55

MANITOWOC VOR/DME 111.0T 122.1R

MENOMINEE VOR/DME 109.6T 122.1R

MILWAUKEE RCO 122.4 122.65

MOSINEE RCO 122.525

NEWBERRY RCO 122.4

OSHKOSH VORTAC 111.8T 122.1R 122.25

PHILLIPS RCO 122.05

PLATTEVILLE RCO 122.5

PRAIRIE DU CHIEN RCO 122.25

RHINELANDER VORTAC 109.2T 122.1R

RICE LAKE RCO 122.3

SAULT STE MARIE VOR/DME 112.2T 122.1R

SAWYER RCO 123.6

SCHOOLCRAFT COUNTY RCO 122.25

SIREN VOR/DME 109.4T 122.1R

STEVENS POINT VORTAC 110.6T 122.1R

TIMMERMAN VOR/DME 112.5T 123.6R

WAUSAU RCO 122.4

WEST BEND VOR 109.8T 122.1R

WISCONSIN RAPIDS RCO 122.45

WOODRUFF RCO 122.6

#### **KANKAKEE AFSS**

BLOOMINGTON VOR/DME 108.2T 123.6R

BRADFORD VORTAC 114.7T 122.05R 123.6

CHICAGO HEIGHTS VORTAC 114.2T 122.1R

CHICAGO MEIGS RCO 122.15

DUPAGE VOR/DME 108.4T 122.1R 122.3

GALESBURG VOR/DME 109.8T 122.1R

JOLIET VORTAC 112.3T 122.1R 122.5

KANKAKEE VOR/DME 111.6T 122.1R 122.2

MACOMB RCO 122.15

MOLINE RCO 122.6

NEW LENOX RCO 122.5

PEORIA RCO 122.35

PEOTONE VORTAC 113.2T 122.05R

POLO VOR/DME 111.2T 122.1R

PONTIAC VOR/DME 109.6T 122.1R

ROCKFORD VOR/DME 110.8T 122.1R 122.65

WAUKEGAN RCO 122.55

#### LANSING AFSS

ALPENA VORTAC 108.8T 122.1R
BAD AXE RCO 122.65
BATTLE CREEK RCO 122.2
BARRIEN SPRINGS RCO 121.625
CARLETON VORTAC 115.7T 122.1R
DETROIT RCO 122.2 122.55
FLINT RCO 122.3
GAYLORD RCO 122.55
GRAND RAPIDS VOR/DME 115.95T 122.1R
JACKSON RCO 122.2
KALAMAZOO VOR/DME 109.0T 122.1R
KEELER VOR/DME 116.6T 122.1R
LANSING RCO 122.2

LANSING RCO 122.2 LITCHFIELD VOR/DME 111.2T 122.1R LUDINGTON RCO 122.45 MANISTEE VOR/DME 111.4T 122.1R MOUNT PLEASANT RCO 122.6 MUSKEGON RCO 122.5 PECK VORTAC 114.0T 122.1R PELLSTON RCO 122.2 122.3 123.6

PONTIAC VORTAC 111.0T 122.15R PULLMAN VOR/DME 112.1T 122.1R SAGINAW RCO 122.2 122.4 SALEM VORTAC 114.3T 122.1R

TRAVERSE CITY RC0 122.2 **122.65**WEST BRANCH RC0 122.35

WHITE CLOUD VORTAC 117.6T 122.1R

#### **SAINT LOUIS AFSS** 122.2 122.45

BIBLE GROVE VORTAC 109.0T 122.05R
CENTRALIA VORTAC 115.0T 122.1R
CHAMPAIGN VORTAC 110.0T 122.1R 122.45
DANVILLE VORTAC 111.0T 122.1R 122.3
MARION VORTAC 117.2T 122.1R 122.3
MARION VOR/DME 110.4T 122.1R
MATTOON VOR/DME 109.4T 123.6R
MOUNT VERNON VOR/DME 113.8T 122.05R
QUINCY VORTAC 113.6T 122.1R 122.5
ROBERTS VOR/DME 116.8T 122.1R
SAINT LOUIS REGIONAL RCO 122.05
SAMSVILLE VOR/DME 116.6T 122.1R
SPINNER VORTAC 112.7T 122.25
VANDALIA VORTAC 114.3T 122.1R

#### **TERRE HAUTE AFSS**

CROWNPOINT RCO 123.65 **EVANSVILLE RCO 122.65** FORT WAYNE RCO 122.2 122.45 GOSHEN VORTAC 113.7T 122.1R HOOSIER VORTAC 110.2T 122.1R INDIANAPOLIS RCO 122.55 KNOX VOR/DME 115.6T 122.1R KOKOMO VORTAC 113.5T 122.1R LAFAYETTE RCO 122.2 122.35 MUNCIE VOR/DME 114.4T 122.1R NABB VORTAC 112.4T 122.1R OSGOOD RCO 122.25 RICHMOND VORTAC 110.6T 122.1R SHELBYVILLE VORTAC 112.0T 122.1R SOUTH BEND RCO 122.6 TERRE HAUTE RCO 122.65 WASHINGTON RCO 122.2

#### FLIGHT STANDARDS DISTRICT OFFICES (FSDO)

Below is a list of FSDO's in the area of coverage of this directory. These offices serve the aviation industry and the general public on matters relating to certification and operation of general aviation aircraft. Address letters to Manager, Flight Standards District Office–Federal Aviation Administration.

#### **ILLINOIS**

DuPage Airport 31W775 North Avenue

West Chicago, Illinois 60185-1056

Telephone: 630-443-3100

Capital Airport

1250 North Airport Drive, Suite 1 Springfield, Illinois 62707-8417 Telephone: 217-744-1910

9950 West Lawrence Ave., Suite 400

Schiller Park, Illinois 60176 Telephone: 847-928-8000

#### **INDIANA**

8303 W. Southern Avenue Indianapolis, Indiana 46241 Telephone: 317-487-2400

1843 Commerce Drive, Suite 200 South Bend, Indiana 46628 Telephone: 219–245–4600

#### **MICHIGAN**

3196 Kraft Ave. SE, Suite 103 Grand Rapids, Michigan 49512 Telephone: 616–954–6657 Willow Run Airport 8800 Beck Road

Belleville, Michigan 48111 Telephone: 734–487–7222

#### OHIO

Great Northern Technology Park II 25249 Country Club Blvd. North Olmsted, Ohio 44070 Telephone: 440–686–2001

Lunken Airport Executive Building Ground Floor

4242 Airport Road Cincinnati, Ohio 45226 Telephone: 513–979–6400

Port Columbus International Airport 2780 Airport Drive, Suite 300 Columbus, Ohio 43219

Columbus, Ohio 43219 Telephone: 614–255–3120

#### **WISCONSIN**

General Mitchell Intl Airport 4915 S. Howell Ave.

Milwaukee, Wisconsin 53207 Telephone: 414–486–2920 352 ROUTES

### PREFERRED IFR ROUTES

A system of preferred routes has been established to guide pilots in planning their route of flight, to minimize route changes during the operational phase of flight, and to aid in the efficient orderly management of the air traffic using federal airways. The preferred IFR routes which follow are designed to serve the needs of airspace users and to provide for a systematic flow of air traffic in the major terminal and en route flight environments. Cooperation by all pilots in filing preferred routes will result in fewer traffic delays and will better provide for efficient departure, en route and arrival air traffic service.

The following lists contain preferred IFR routes for the low altitude stratum and the high altitude stratum. The high altitude list is in two sections; the first section showing terminal to terminal routes and the second section showing single direction route segments. Also, on some high altitude routes low altitude airways are included as transition routes.

The following will explain the terms/abbreviations used in the listing:

- 1. Preferred routes beginning/ending with an airway number indicate that the airway essentially overlies the airport and flight are normally cleared directly on the airway.
- 2. Preferred IFR routes beginning/ending with a fix indicate that aircraft may be routed to/from these fixes via a Standard Instrument Departure (SID) route, radar vectors (RV), or a Standard Terminal Arrival Route (STAR).
- 3. Preferred IFR routes for major terminals selected are listed alphabetically under the name of the departure airport. Where several airports are in proximity they are listed under the principal airport and categorized as a metropolitan area;
- 4. Preferred IFR routes used in one direction only for selected segments, irrespective of point of departure or destination, are listed numerically showing the segment fixes and the direction and times effective.
  - 5. Where more than one route is listed the routes have equal priority for use.
  - 6. Official location identifiers are used in the route description for VOR/VORTAC navaids.
  - 7. Intersection names are spelled out.
- 8. Navaid radial and distance fixes (e.g., ARD201113) have been used in the route description in an expediency and intersection names will be assigned as soon as routine processing can be accomplished. Navaid radial (no distance stated) may be used to describe a route to intercept a specified airway (e.g., MIV MIV101 V39); another navaid radial (e.g., UIM UIM255 GSW031); or an intersection (e.g., GSW081 FITCH).
- 9. Where two navaids, an intersection and a navaid, a navaid and a navaid radial and distance point, or any navigable combination of these route descriptions follow in succession, the route is direct.
- 10. The effective times for the routes are in UTC. During periods of daylight saving time effective times will be one hour earlier than indicated. All states observe daylight saving time except Arizona, Puerto Rico and the Virgin Islands. Pilots planning flight between the terminals or route segments listed should file for the appropriate preferred IFR route.
  - 11. (90-170 incl) altitude flight level assignment in hundred of feet.
- 12. The notations "pressurized" and "unpressurized" for certain low altitude preferred routes to Kennedy Airport indicate the preferred route based on aircraft performance.
  - 13. High Altitude Preferred IFR Routes are in effect during the following time periods unless otherwise noted.

Sun	1300-2259 local time.
Mon thru Fri	0701-2259 local time.
Sat	0701-1459 local time.

- 14. Use current SIDs and STARSs for flight planning.
- 15. For high altitude routes, the portion of the routes contained in brackets [ ] is suggested but optional. The portion of the route outside the brackets will likely be required by the facilities involved.

### **LOW ALTITUDE**

Terminals	Route	Effective Times (UTC)
CHICAGO METRO AREA		
From Midway (MDW) or O'Hare (ORD)		
Atlanta (ATL)	EON V171 TTH V243 GQO V333 DALAS ATL	
Denver (DEN)	SIMMN V172 OBH V219 HCT V8 DVV	
Indianapolis (IND)	EON V399 KENLA V128 JELLS	
Louisville (LOU)	EON V171 TTH V243 IIU279 CHERI	1100-0300
Memphis (MEM)	RBS V429 MWA V67 CNG V11 MIOLA	1600-2300
Miami (MIA)	EON V171 TTH V243 LGC V321 PZD V159 CTY V7	
	LAL V157 LBV V529 V35 CURVE	1100-0300
Pittsburgh (PIT)	GIJ V6 DJB V30 ACO V337 CUTTA	1100-0300
San Francisco (SFO)	SIMMN V172 PLL V158 DBQ V100 MBW V6 FMG	
	V6	
Tampa (TPA)	EON V171 TTH V243 LGC V321 PZD V159 CTY	
	V35 ENDED	
	or	
	(GPS or DME/DME-IRU Equipped) EON V171 TTH	
	V243 LGC V321 PZD V159 CTY V35 ENDED	

		Effective Times (UTC)
Terminals	Route	
Tulsa (TUL)	MZV BRL V63 SGF V14 EON V144 ESL V4 MANNE	0000-2359 1100-0300
From Midway (MDW) only		
Des Moines (DSM)	SIMMN V172 TNU	1100-0300
Detroit Metro-Wayne Co. (DTW)	GIJ V10 LFD MIZAR-STAR	
Detroit Satellites:		
Ann Arbor (ARB)		
Pontiac (PTK) Willow Run (YIP)	GIJ V10 LFD CRUXX-STAR	
Windsor (YQG)	GIJ VIO LID GROAX-STAR	
Young (DET)	GIJ ELX V218 LAN SPRTN-STAR	
Kansas City (MKC)	MZV BRL V10 IRK BQS-STAR	1100-0300
Omaha (OMA)	SIMMN V172 OVR	0000-2359
From O'Hare (ORD) only		
Cleveland (CLE)	GIJ V6 VWV WAKEM-STAR	1100-0300
Des Moines (DSM)	SIMMN V172 TNU	0000-2359
Detroit Metro-Wayne Co (DTW)	PETTY MKG POLAR-STAR	
Detroit Satellites:		
Ann Arbor (ARB)		
Pontiac (PTK)		
Willow Run (YIP)		
Windsor (YQG)		
Young (DET)	MUSKY V100 ELX V218 LAN SPRTN-STAR	
Kansas City (MKC)	MZV BRL V10 IRK BQS-STAR	
Memphis (MEM)	RBS V429 MWA V67 CNG V11 MIOLA	0000–2359
Muskegon (MKG)	PETTY V216	0000 0250
Omaha (OMA)	SIMMN V172 OVR PETTY MKG V216	0000–2359
Saginaw (MBS) From O'Hare (ORD) and North Satellite	PETIT WING V210	
Airports		
Detroit Metro-Wayne Co. (DTW)	(150-230 incl) PETTY MKG POLAR-STAR	1100-0300
CINCINNATI METRO AREA (CVG, LUK)	(130-230 IIICI) I ETTT WING I OLAK-STAK	1100-0300
Detroit/Wayne (DTW)	DQN MIZAR-STAR	1100-0300
Detroit Satellites:	- <del>(</del> · · · · <del>-</del> · · · · · · · · · · · · · · · · · · ·	
Ann Arbor (ARB)	DQN CRUXX-STAR	1100-0300
Pontiac (PTK)		
Willow Run (YIP)	DQN CRUXX-STAR	
Windsor (YQG)		
Young (DET)	V275 KLINE VWV VWV064 LYNTN	
From COVINGTON (CVG) only		
Atlanta (ATL)	V97 VXV V267 HRS V463 WOMAC	1100-0300
Chicago Midway (MDW)	V128 VHP BVT V97 CGT	1100-0300
Chicago O'Hare (ORD)	V128 VHP BVT V97 CGT V7 BEBEE	1100-0300
Indianapolis (IND)	V128 VHP	1100-0300
Knoxville (TYS)	HYK V97	1100 0200
Louisville (SDF)	CVG206 IIU055 IIU	1100-0300
Pittsburgh (PIT)	(60–170 incl) V128 YRK V44 JPU V117 WISKE WISKE–STAR	1100 0200
CLEVELAND METRO AREA (CLE, CGF, BKL, LNN, LPR)	WISHL-STAN	1100-0300
Baltimore (BWI)	(90-170 incl) ACO AIR V75 MGW V44 MRB V3	
	EMI	1100-0300
Boston (BOS)	(60–170 incl) V522 ERI V270 CFB V72 ALB V2 GDM GDM-STAR	1100-0300
Buffalo (BUF)	(60-170 incl) V522 ERI V43 WELLA	
Chicago Midway (MDW)	(60-170 incl) SKY VWV V126 CGT	1100-0300
Chicago O'Hare (ORD)	(60-170 incl) V45 VWV V126 HALIE V340	
	BEARZ	1100-0300
Columbus (CMH)	(60–170 incl) DJB DJB173 HERAK APE035 APE	
Dayton (DAY)	(60–170 incl) OBRLN-DP ROD	
Detroit/Wayne (DTW)	(60–170 incl) DJB DJB314 GEMNI GEMNI–	
	STAR	
Detroit Satellites:		
Ann Arbor (ARB)		
Pontiac (PTK)		

		Effective Times (UTC)
Terminals Willow Run (YIP)	Route	
Windsor (YQG)		
Young (DET) Indianapolis (IND)	(60–170 incl) DJB LLEEO-STAR (60–170 incl) OBRLN-DP MIE MIE244 CLANG CLANG-STAR	1100-0300
Pittsburgh (PIT)	(60–170 incl) ACO V337 CUTTA	1100-0300
Rochester (ROC)	(60-170 incl) V522 ERI V14 BUF V2 CLUNG	1100-0300
Washington Dulles (IAD)	(90–170 incl) ACO AIR V75 MGW V144 ESL V4 AML	1100-0300
	or	
Washington Natl (DCA)	(90-170 incl) ACO AIR V75 MGW V44 MRB AML (90-170 incl) ACO AIR V75 MGW V144 ESL V4	1100-0300
COLUMBUS (CMH)	AML	1100-0300
Cleveland (CLE)	(60-170 incl) V43 TVT KEATN-STAR	1100-0300
Pittsburgh (PIT)	(60-170 incl) APE V12 CTW WISKE-STAR	1100-0300
Toledo (TOL)  DAYTON (DAY)	V493 VWV	1100-0300
Chicago Midway (MDW)	V55 V422 CGT	1100-0300
Chicago O'Hare (ORD)	V55 FWA V340 BEARZ	1100-0300
Cleveland (CLE)	DQN ABERZ-STAR	1100-0300
Detroit Metro-Wayne Co (DTW)  Detroit Satellites:	DQN MIZAR-STAR	1100-0300
Ann Arbor (ARB) Pontiac (PTK)		
Willow Run (YIP)	DQN CRUXX-STAR	
Windsor (YQG)	- • • • • • • • • • • • • • • • • • • •	
Young (DET)	V275 KLINE VWV VWV064 LYNTN	
Washington Dulles (IAD)	(90–170 incl) ZZV V144 ESL V4 AML or	1100-0300
	(90-170 incl) ZZV V14 MGW V44 MRB AML	1100-0300
Washington Natl (DCA)	(90-170 incl) ZZV V144 ESL V4 AML	1100-0300
DETROIT METRO AREA (Detroit Metro-Wayne Co & Satellites)		
Albany (ALB)	(60-170 incl) TYCOB V116 BFD V72	1100-0300
Atlantic City (ACY)	(60–170 incl) ERRTH-DP CXR YNG V6 SEG V170 MXE V184	1100-0300
Boston (BOS)	(60-170 incl) TYCOB V116 BFD V72 ALB V2	
D. Hala (BUE)	GDM	1100-0300
Buffalo (BUF) Chicago Midway (MDW)	(60–170 incl) TYCOB V90 DKK HARWL JXN V116 LEROY GSH CGT	1100-0300 1100-0300
Chicago O'Hare (ORD)	FWA-DP FWA KNOX-STAR	1100-0300
	or FWA-DP FWA WATSON (RNAV)-STAR	
	or HARWL JXN V116 ELX V100 DEERE	
	or GRR MKG V510 FAH BJB OBK	
Cleveland (CLE)	MAARS ACO319 HIMEZ HIMEZ-STAR	
Columbus (CMH)	CAVVS VWV FDY V279 GUNNE	1100-0300
Fort Wayne (FWA)	(60–170 incl, Props) HARWL JXN V221	1100-0300
	(60-170 incl, Jets) ANNTS DX0217 FWA071	1100-0300
Indianapolis (IND)	HARWL JXN V221 MIE V14 CLANG-STAR	1100-0300
Milwaukee (MKE)	(60–170 incl) DUNKS V170 PMM V170 PETTY	1100-0300
Montreal (CYUL)	(60–170 incl) TYCOB V116 ERI V270 ELZ V501 SYR MSS V203 FRANX FRANX–STAR	1100-0300
Pittsburgh (PIT)	(60–170 incl) ACO CUTTA–STAR	1100-0300
Rochester (ROC)	(60–170 incl) TYCOB YQG 098 SURLY DKK V14	
	BUF	1100-0300
Syracuse (SYR)	(60–170 incl) TYCOB V116 ERI V14 GEE V84	1100-0300
Washington Natl (DCA)	(60–170 incl) ACO AIR V75 MGW V144 ESL V4	1100 0200
Westchester Co (HPN)	MANNE(60–170 incl) TYCOB V116 ERI V270 V433 V157	1100-0300
Westerlester oo (III N)	HAARP	1100-0300
	or	

		Times (UTC)
Terminals	Route	
	(60–170 incl, props less than 250 kts) TYCOB	4400 0000
EODT WAYNE (EWA)	V116 ERI V270 V433 V123 HAARP	1100-0300
FORT WAYNE (FWA) Moline (MLI)	V144 BDF V156 MZV	0000-2359
Rockford (RFD)	V144 SMARS V128	0000-2359
GREATER PEORIA RGNL (PIA)	V144 SWANS V120	0000-2339
Chicago Midway (MDW)	PIA PIA056 MOTIF JOT	
Chicago O'Hare (ORD)	PIA PIAO35 V10 PLANO	
INDIANAPOLIS (IND)		
Cleveland Metro Area (CLE) (CGF) (BKL)		
(LNN) (LPR)	(RNAV only/60-170 incl) DQN TOOOK MFD	
	ABERZ ABERZ-STAR	
	or	
	(all others/60-170 incl) DQN MFD MFD048	
	ABERZ ABERZ-STAR	
Detroit Metro-Wayne Co (DTW)	FWA MIZAR-STAR	
	FWA CRUXX-STAR	
Detroit Satellites:		
Ann Arbor (ARB)		
Pontiac (PTK)		
Willow Run (YIP)	FWA CRUXX-STAR	
Windsor (YQG)		
Young (DET)	V275 KLINE VWV VWV051 P00FE	
Evansville (EVV)	V305	
Kansas City (MKC)	V50 SPI BQS-STAR	0000-2359
Pittsburgh (PIT)	(60-170 incl) V50 DQN V12 CTW WISKE-STAR	1100-0300
Springfield (SGF)	V11 PXV V190	0000–2359
	Or TTU DID V70 FAM V400	0000 0050
Tuloo (TIII.)	TTH BIB V72 FAM V190 V11 PXV V190 SGF V14	0000-2359
Tulsa (TUL)	TTH BIB V72 ENL V234 EMP V12	0000-2359
Wichita (ICT) MILWAUKEE (MKE)	11H BIB V/2 ENL V234 EIVIP V12	0000–2359
Detroit Metro–Wayne Co (DTW)	(60-170 incl) SQUIB MKG POLAR-STAR	
Detroit Satellites:	(00-170 IIICI) SQUID WING I OLAN-STAN	
Ann Arbor (ARB)		
Pontiac (PTK)		
Willow Run (YIP)		
Windsor (YQG)		
Young (DET)	GRR LAN SPRTN-STAR	
MOLINE (MLI)	VAEC DDE VAAA	0000 0050
Fort Wayne (FWA) South Bend (SBN)	V156 BDF V144 V156 BDF V144 MAPPS V156	0000-2359
ROCKFORD (RFD)	V130 BDF V144 WAPP3 V130	0000–2359
Fort Wayne (FWA)	V128 SMARS V144	0000-2359
South Bend (SBN)	V128 SMARS V144 MAPPS V156	0000-2359
SOUTH BEND (SBN)	VIZO SWANS VI44 WALLS VISO	0000-2555
Moline (MLI)	V156 MAPPS V144 BDF V156 MZV	0000-2359
Rockford (RFD)	V156 MAPPS V144 SMARS V128	0000-2359
SPRINGFIELD (SPI)	7200 11711 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	0000 2000
Chicago Midway (MDW)	PNT MOTIF-STAR	0000-2359
Chicago O'Hare (ORD)	PNT V227 PLANO	0000-2359
Springfield (SGF)	V50 UIN V63 SGF V14	0000-2359
Tulsa (TUL)	V50 UIN V63 SGF V14	0000-2359
TERRE HAUTE (HUF)		
Kansas City (MKC)	V50 SPI BQS-STAR	0000-2359
Springfield (SGF)	V7 PXV V190	0000-2359
Tulsa (TUL)	V7 PXV V190 SGF V14	0000-2359
SPECIAL LOW	ALTITUDE DIRECTIONAL ROUTES	
SPECIAL LOW	ALTITODE DIRECTIONAL ROOTES	Fee
		Effective
	P. C.	Times
Low Alexandr IED streets 19 19 19 19 19 19	Route	(UTC)
Low Altitude IFR single–direction route for tra Westbound	ffic overflying ZOB ARTCC landing at ORD: JXN V116 ELX V100 DEERE	
Low Altitude IFR single–direction route for tra	ffic overflying ZOB ARTCC landing at ORD: OXI KNOX–STAR	
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Terminals

# PREFERRED IFR ROUTES HIGH ALTITUDE

Route

Effective Times (UTC)

reminais	Route	(010)
AKRON (CAK)		
Detroit/Wayne (DTW)	DJB DJB314 GEMNI GEMNI-STAR	
CHICAGO METRO AREA (ORD, MDW)	(B) (A) (B) (B) (B) (B) (B) (B) (B) (B) (B) (B	
Atlanta (ATL)	(RNAV only) GUIDO J73 PXV BNA ERLIN	
	(RNAV)-STAR	
	or	
	(all others) GUIDO J73 PXV BNA ROME-STAR	
Baltimore (BWI)	GIJ J146 J34 DJB J162 MGW EMI-STAR	
Birmingham (BHM)	EON DNB BNA VUZ	
Boca Raton (BCT)	(GPS or DME/DME-IRU equipped) EON DNV TTH	
	SWAPP ATL J89 OTK PRRIE (RNAV)-STAR	
Boston (BOS)	ELX CRL J554 JHW J82 ALB GDM GDM-STAR	
Bristol/Johnson/Kingsport (TRI)	EON DNV VHP J24 FLM HMV	
Charleston (CHS)	EON DNV VHP J24 FLM	
Charleston (CRW)	EON DNV VHP J24 FLM HVQ	
Charlotte (CLT)	EON DNV VHP J24 FLM JOHNS (RNAV)-STAR	
Chattanooga (CHA)	EON DNV	
Cincinnati (CVG)	(RNAV only) EON DNV CEGRM (RNAV)-STAR	
	or	
	(all others) EON DNV SHELBYVILLE-STAR	
Columbia (CAE)	EON DNV VHP J24 FLM	
Columbus (CMH)	GIJ GIJ092036 FWA J178 APE	
Dallas/Fort Worth (DFW)	RBS STL RZC FSM BYP	
Dayton (DAY)	GIJ GIJ092036 FWA ROD DQN	
Denver (DEN)	IOW DSM J10 LBF SAYGE-STAR	
	or	
	PLL PLL275065 FOD J94 ONL J114 SNY	
	LANDR-STAR	
Detroit/Wayne (DTW)	PETTY MKG POLAR-STAR	
Evansville (EVV)	GUIDO	
Fort Lauderdale (FLL)	GUIDO J73 SZW J43 PIE FORTL-STAR	
	or	
	EON DNV TTH SWAPP ATL J89 HITTR PIE	
	FORTL-STAR	
	or	
	(GPS or DME/DME-IRU equipped) EON DNV TTH	
	SWAPP ATL J89 OTK JINGL (RNAV)-STAR	
Greensboro (GSO)	EON DNV VHP J24 FLM	
Greer (GSP)	EON DNV VHP J24 FLM SOT SUG V185 UNMAN	
Harrisburg (MDT)	GIJ J146 J34 DJB J518 J152 HAR	
Huntsville (HSV)	EON DNV	
Jacksonville (JAX)	EON DNV TTH SWAPP ATL AMG ALMA-STAR	
Kennedy (JFK)	ELX CRL J554 JHW J70 LVZ LENDY-STAR	
Knoxville (TYS)	EON DNV VHP J24 FLM J43 VXV	
La Guardia (LGA)	GIJ J146 MIP MIP-STAR	
Memphis (MEM)	RBS FAM ARG GQE-STAR	
Mempins (MEM)	or	
	GUIDO J73 PXV WLDER-STAR	
Miami (MIA)	GUIDO J73 SZW J43 PIE CYY-STAR	
WIGHT (WIA)	or	
	(Turbojets-GPS or DME/DME-IRU equipped) EON	
	DNV TTH SWAPP ATL SZW SSCOT	
Murtle Beeck (MVD)	(RNAV)-STAR	
Myrtle Beach (MYR)	EON DNV VHP J24 FLM	
Nashville (BNA)	EON DNV TTH HEHAW-STAR	
Newark (EWR)	ELX CRL J584 SLT FQM-STAR	
Norfolk (ORF)	EON DNV VHP J24 MOL TERKS-STAR	
Oakland (OAK)	PLL PLL275065 FOD J94 ONL J148 OAL MOD	
	or	4500 0400
	PLL PLL275065 FOD J94 LCU J158 MVA	1500-0400

Terminals	Route	Effective Times (UTC)
Orlando Exec (ORL)	EON DNV TTH BWG GQO ATL J89 OTK	(010)
	LEESE-STAR	
Orlando Intl (MCO)	EON DNV TTH SWAPP ATL J89 OTK LEESE-STAR	
Philadelphia (PHL) Phoenix (PHX)	GIJ J146 CXR EWC JST BUNTS-STAR MZV STJ J18 FTI J19 ZUN BUNTR-STAR	1200-0400
	or	1200 0.00
	IOW J192 PWE J64 PUB ALS J102	
Pittsburgh (PIT)	GIJ J146 J34 DJB ACO V337 CUTTA	
Pottstown (PTW) Raleigh–Durham (RDU)	GIJ J146 CXR EWC JST EON DNV VHP J24 FLM BKW ROA SBV-STAR	
Richmond (RIC)	EON DNV VHP J24 FLM MOL FAK	
Roanoke (ROA)	EON DNV VHP J24 FLM	
St. Petersburg–Clearwater (PIE)	GUIDO J73 SZW DARBS-STAR	1500 0400
San Francisco (SFO) San Jose (SJC)	PLL PLL275065 FOD J94 FMG ILA PYEPLL PLL275065 FOD J94 FMG HYP-STAR	1500–0400
	or	
	DBQ J94 LCU HYP-STAR	1500-0400
Sarasota/Bradenton (SRQ) Tampa (TPA)	GUIDO J73 PXV J73 SZW CLAMP-STAR GUIDO J73 PXV J73 SZW DARBS-STAR	
таттра (тғ.к)	or	
	(GPS or DME/DME-IRU equipped) GUIDO J73 PXV	
	J73 SZW FOXX (RNAV)-STAR	
Toledo (TOL)	GIJ J146 PLAIN VWV GIJ J146 J34 BUCKO-STAR	
Washington Natl (DCA)	GIJ J146 J34 SHAAR WZRRD-STAR	
3,	or	
	(GPS or DME/DME-IRU equipped) GIJ J146 J34	
	BUCKO ELDEE (RNAV)-STARor	
	GIJ J146 J34 SHAAR ELDEE (RNAV)-STAR	
West Palm Beach (PBI)	(all others) EON DNV TTH SWAPP ATL OTK WLACE	
	(RNAV)-STAR	
	or (GPS or DME/DME-IRU equipped) DENNT DARCY	
	DREGS DUMGE SWAPP ATL J89 OTK WLACE	
	(RNAV)-STAR	
	or	
	(GPS or DME/DME-IRU equipped) EON DNV TTH IIU J99 VXV J43 WLACE (RNAV)-STAR	
	or	
	(all others) ORD EON DNV TTH SWAPP ATL OTK	
	WLACE (RNAV)-STAR	
Windsor Locks (BDL)	ELX CRL J554 JHW J82 WILET RKA292 RKA SWEDE-STAR	
CHICAGO Midway (MDW) only	SWEDE-STAIL	
Albany (ALB)	LEWKE GIJ EVOTE NELLS KEEHO JHW J82	
Allentown (ABE)	LEWKE GIJ J146 FJC CMSKY CARYN CYBIL PXV J73 BNA ROME-STAR	
Addita (ATE)	or	
	CMSKY CARYN CYBIL PXV BNA ERLIN	
B. W. (BW)	(RNAV)-STAR	
Baltimore (BWI)	LEWKE GIJ OTENS ANEWA RIEKE DJB J34 AIR KEMAN WESTMINSTER-STAR	
Birmingham (BHM)	CMSKY CARYN CYBIL PXV	
Bristol/Johnson/Kingsport (TRI)	EARND ELANR EMMLY ETAME EMEGE FLM	
Boca Raton (BCT)	(GPS or DME/DME-IRU equipped) GUIDO J73	
	SZW PRRIE (RNAV)-STARor	
	(GPS or DME/DME-IRU equipped) EON DNV TTH	
	SWAPP ATL J89 OTK PRRIE (RNAV)-STAR	
	Or  (GPS or DME /DME_IBIL oquipped) DENNT DARCY	
	(GPS or DME/DME-IRU equipped) DENNT DARCY DREGS DUMGE SWAPP ATL J89 OTK PRRIE	
	(RNAV)-STAR	
Boston (BOS)	LEWKE GIJ EVOTE NELLS KEEHO JHW J82 ALB	
	GARDNER-STAR	

		Times
Terminals	Route	(UTC)
Buffalo (BUF)	LEWKE GIJ EVOTE NELLS KEEHO DKK	
Charleston (CHS, CRW)	EARND ELANR EMMLY ETAME EMEGE FLM	
Charlotte (CLT)	EARND ELANR EMMLY ETAME FLM JOHNS	
	(RNAV)-STAR	
Chattanooga (CHA)	DENNT DARCY DREGS DONVE BWG	
Cincinnati (CVG)	DENNT DARCY DNV CEGRM (RNAV)-STAR	
	or	
Clausiand (CLE)	DENNT DARCY DNV SHB-STAR	
Cleveland (CLE)	elx crl himez-star	
	LEWKE GIJ CRL HIMEZ-STAR	
Columbia (CAE)	EARND ELANR EMMLY ETAME EMEGE FLM	
Columbus (CMH)	LEWKE GIJ SEWTO FWA GUNNE-STAR	
Dallas/Fort Worth (DFW)	ACITO ADELL ARLYN STL RZC FSM	
	BONHAM-STAR	
Detroit Metro-Wayne Co (DTW)	GIJ LFD MIZAR-STAR	
Detroit Metro Area (ARB, PTK, YIP)	GIJ LFD CRUXX-STAR	
Detroit Metro Area (DET, CYQG)	GIJ LAN SPRTN-STAR	1200-0400
Evansville (EVV) Fort Lauderdale (FLL)	DENNT DARCY DREGS DONVE DENNT DARCY DREGS DUMGE SWAPP ATL J89	
Tort Lauderdale (LL)	OTK JINGL (RNAV)-STAR	
	or	
	(GPS or DME/DME-IRU equipped) DENNT DARCY	
	DREGS DUMGE SWAPP ATL J89 OTK JINGL	
	(RNAV)-STAR	
	or	
	EON DNV TTH IIU J99 VXV J46 AMG TAY JINGL	
	(RNAV)-STAR	
	or	
	(GPS or DME/DME-IRU equipped) EON DNV TTH	
Fort Myers (RSW)	SWAPP ATL J89 OTK JINGL (RNAV)-STAR CMSKY CARYN CYBIL PXV J73 SZW TYNEE	
Torcinyers (NOW)	(RNAV)-STAR	
	or	
	(GPS or DME/DME-IRU equipped) GUIDO J73 PXV	
	J73 SZW TYNEE (RNAV)-STAR	
Greensboro (GSO)	EARND ELANR EMMLY ETAME FLM PSK	
	SMOKN-STAR	
Greenville-Spartanburg (GSP)	EARND ELANR EMMLY ERECO IIU	
Houston (HOU)	(GPS or DME/DME-IRU equipped) BACEN BLOKR	
	BEKKI FAM J137 LIT J180 SWB ROKIT	
	(RNAV)-STARor	
	(Non-advanced NAV only) BACEN BLOKR BEKKI	
	FAM J137 LIT J180 SWB DAS-STAR	
Houston (IAH)	(Turbojets-GPS or DME/DME-IRU equipped)	
	BACEN BLOKR BEKKI FAM J137 LIT J180 SWB	
	TXMEX (RNAV)-STAR	
	or	
	(Non-advanced NAV only) BACEN BLOKR BEKKI	
Haraka Mila (HOV)	FAM J137 LIT J180 SWB DAS-STAR	
Huntsville (HSV)	DENNT DARCY DREGS DONVE BWG	
Islip (ISP)	LEWKE GIJ EVOTE NELLS KEEHO JHW J70 STW	
Jacksonville (JAX)	DENNT DARCY DREGS DUMGE SWAPP AMG	
22	ALMA-STAR	
La Guardia (LGA)	LEWKE GIJ J146 ETG MILTON-STAR	
Memphis (MEM)	BACEN BLOKR BEKKI FAM ARG GILMORE-STAR	
	or	
	CMSKY CARYN CYBIL PXV WLDER-STAR	
Miami (MIA)	DENNT DARCY DREGS DUMGE SWAPP ATL SZW	
	J43 PIE CYPRESS-STAR	
	or (Turbojets-GPS or DME/DME-IRU equipped)	
	DENNT DARCY DREGS DUMGE SWAPP ATL SZW	
	ISE OTK SSCOT (RNAV)-STAR	

J86 OTK SSCOT (RNAV)-STAR.....

Terminals	Route	Times (UTC)
	or	
	(Turbojets-GPS or DME/DME-IRU equipped) GUIDO J73 SZW SSCOT (RNAV)-STAR or	
	(Turbojets-GPS or DME/DME-IRU equipped) EON DNV TTH IIU J99 VXV J46 AMG TAY SSCOT (RNAV)-STAR	
	or EON DNV TTH SWAPP ATL SZW J43 PIE CYPRESS-STAR	
Minneapolis (MSP)	BAE EAU-STAR LEWKE GIJ EVOTE NELLS KEEHO JHW J82 ALB EEN	1200-0400
Nashville (BNA)	CMSKY CARYN CYBIL PXV CCT HEHAW-STAR LEWKE GIJ EVOTE NELLS KEEHO J584 SLT FQM	
New Orleans (MSY)	WILLIAMSPORT-STAR  BACEN BLOKR BEKKI ENL J71 MEM J35 MCB	
Norfolk (ORF)	RYTHM-STAR  EARND ELANR EMMLY ETAME EMEGE FLM J24  MOL TERKS-STAR	
Orlando (MCO/ORL)	DENNT DARCY DREGS DUMGE SWAPP ATL J89 OTK PIGLT (RNAV)-STAR	
Phoenix (PHX	or DENNT DARCY DREGS DUMGE SWAPP ATL J89 OTK LEESE-STAR MZV J18 FTI J19 ZUN EAGUL (RNAV)-STAR or	1100-0400 1200-0400
Philadelphia (PHL)	MZV LMN J64 HLC LAA J102 GUP EAGUL (RNAV)-STAR LEWKE GIJ J146 CXR EWC JST BUNTS-STAR	
Pittsburgh (PIT)	LEWKE GIJ OTENS ANEWA RIEKE DJB ACO CUTTA-STAR	
Providence (PVD)	LEWKE GIJ EVOTE NELLS KEEHO JHW J82 MEMMS J522 HNK TEDDY	
Raleigh/Durham (RDU)	EARND ELANR EMMLY ETAME EMEGE FLM BKW ROA SOUTH BOSTON-STAR	
Richmond (RIC)	EARND ELANR ETAME EMEGE FLM J24 FAK	
Rochester (ROC)	LEWKE GIJ EVOTE NELLS KEEHO DKK BUF CMSKY CARYN CYBIL PXV J73 SZW	
Sarasota/Bradenton (SRQ)	DARBS-STARCMSKY CARYN CYBIL PXV J73 SZW CLAMP-STAR	
Tampa (TPA)	CMSKY CARYN CYBIL PXV J73 SZW FOOXX (RNAV)-STAR	
	CMSKY CARYN CYBIL PXV J73 SZW DARBS-STAR	
Teterboro (TEB)	LEWKE GIJ EVOTE NELLS KEEHO JHW J70 LVZ WILKES BARRE-STAR	
Trenton (TTN)	LEWKE GIJ J146 CXR EWC JST BUNTS-STAR	
Washington Dulles (IAD)	LEWKE GIJ OTENS ANEWA RIEKE DJB J34 AIR MGW MGW121 VERNI ESL ROYIL-STAR or	
	(GPS or DME/DME-IRU equipped) LEWKE GIJ OTENS ANEWA RIEKE DJB J34 AIR MGW VERNI	
Washington Natl (DCA)	ESL SHNON (RNAV)-STAR(GPS or DME/DME-IRU equipped) GIJ J146 J34 BUCKO ELDEE (RNAV)-STAR	
	or LEWKE GIJ OTENS ANEWA RIEKE DJB J34 SHAAR WZRRD-STAR	
	or (GPS or DME/DME-IRU equipped) LEWKE GIJ	
	OTENS ANEWA RIEKE DJB J34 SHAAR ELDEE (RNAV)-STAR	
White Plains (HPN)	LEWKE GIJ EVOTE NELLS KEEHO JHW ITH DNY	

VALRE-STAR .....

Effective Times (UTC)

Terminals	Route	(UTC)
Windsor Locks (BDL)	LEWKE GIJ EVOTE NELLS KEEHO JHW J82 WILET	
CHICAGO O'Hare (ORD) only	SWEDE-STAR	
Akron (CAK)	MOBLE ADIME OTENS VWV MFD V8 DALTS	
Albany (ALB)	EBAKE WISMO POSTS PADDE SVM DKK	
Allentown (ABE)	MOBLE ADIME GERBS J146 MIP	
Andrews AFB (ADW)	MOBLE ADIME OTENS ANEWA RIEKE DJB J34	
Atlanta (ATL)	SHAAR WZRRD-STAR CMSKY CARYN CYBIL PXV J73 BNA ROME-STAR	
	CMSKY CARYN CYBIL PXV BNA ERLIN (RNAV)-STAR	
Atlantic City (ACY)	MOBLE ADIME GERBS J146 CXR EWC JST J152 HAR SIE	
Baltimore (BWI)	MOBLE ADIME OTENS ANEWA RIEKE DJB J34 AIR KEMAN WESTMINSTER-STAR	
Bedford (BED)	EBAKE WISMO POSTS PADDE SVM DKK ALB GDM V431 LOBBY	
Birmingham (BHM)	CMSKY CARYN CYBIL PXV	
Boca Raton (BCT)	(GPS or DME/DME-IRU equipped) GUIDO J73	
, ,	SZW PRRIE (RNAV)-STAR	
	(GPS or DME/DME-IRU equipped) EON DNV TTH	
	SWAPP ATL J89 PRRIE (RNAV)-STAR	
	(GPS or DME/DME-IRU equipped) DENNT DARCY	
	DREGS DUMGE SWAPP ATL J89 OTK PRRIE (RNAV)-STAR	
Boston (BOS)	EBAKE WISMO POSTS PADDE SVM DKK ALB	
( 1 1 )	GARDNER-STAR	
Bristol/Johnson/Kingsport (TRI)	EARND ELANR EMMLY ETAME EMEGE FLM	
Buffalo (BUF)	DUFEE ELX HAAKK DOXXY SOSIC COHOW DKK	
Burlington (BTV)	EBAKE WISMO POSTS PADDE SVM DKK SYR J29	
01 1 1 (0110 0011)	LAGGS	
Charleston (CHS, CRW)	EARND ELANR EMMLY ETAME EMEGE FLM	
Charlotte (CLT)	EARND ELANR EMMLY ETAME FLM JOHNS	
Chattanooga (CHA)	(RNAV)-STAR  DENNT DARCY DREGS DONVE BWG	
Cincinnati (CVG)	DENNT DARCY DNV CEGRM (RNAV)-STAR	
ememmati (eva)	or	
	DENNT DARCY DNV SHELBYVILLE-STAR	
Cleveland (CLE)	DUFEE ELX HIMEZ-STAR	
Columbia (CAE)	EARND ELANR EMMLY ETAME EMEGE FLM	
Columbus (CMH)	MOBLE ADIME SEWTO FWA GUNNE-STAR	
Dallas/Fort Worth (DFW)	ACITO ADELL ARLYN STL RZC FSM	
Denies (DEN)	BONHAM-STAR	
Denver (DEN)	IOW DSM J10 LBF SAYGE-STAR	
Detroit Metro-Wayne Co (DTW)	DBQ J94 ONL J114 SNY LANDR-STAR	
Detroit Metro Area (DET, CYQG, PTK, YIP,	PETTY MKG POLAR-STAR	4000 0400
ARB) Evansville (EVV)	PETTY GRR LAN SPRTN-STAR  DENNT DARCY DREGS DONVE	1200-0400
Fort Lauderdale (FLL)	DENNT DARCY DREGS DUMGE SWAPP ATL J89	
Torc Lauderdale (LE)	OTK JINGL (RNAV)-STAR	
	or DENNT DARCY DREGS SWAPP ATL J89 OTK JINGL	
	(RNAV)-STAR	
	(GPS or DME/DME-IRU equipped) EON DNV TTH	
Fort Myers (RSW)	IIU J99 VXV J46 AMU TAY JINGL (RNAV)-STAR (GPS or DME/DME-IRU equipped) CMSKY CARYN	
TOTE WIYETS (NOW)	CYBIL PXV J73 SZW TYNEE (RNAV)-STAR	
	or	
	(GPS or DME/DME-IRU equipped) GUIDO J73 PXV	
	J73 SZW TYNEE (RNAV)–STAR	
Greensboro (GSO)	EARND ELANR EMMLY ETAME EMEGE FLM PSK	
	SMOKN-STAR	

Effective Times (UTC)

	<b>.</b> .	Times
Terminals	Route	(UTC)
Greenville/Spartanburg (GSP)	EARND ELANR EMMLY ERECO IIU	
Harrisburg (MDT)	MOBLE ADIME GERBS J146 CXR EWC HAR	
Houston (HOU)	(GPS or DME/DME-IRU equipped) BACEN BLOKR	
	BEKKI FAM J137 LIT J180 SWB ROKIT	
	(RNAV)-STAR	
	Or	
	(Non-advanced NAV only) BACEN BLOKR BEKKI	
Haveton (IAH)	FAM J137 LIT J180 SWB DAS-STAR	
Houston (IAH)	(Turbojets-GPS or DME/DME-IRU equipped)	
	BACEN BLOKR BEKKI FAM J137 LIT J180 SWB	
	TXMEX (RNAV)-STAR	
	Or (Non-advanced NAV only) BACEN BLOKE BEKKI	
	(Non-advanced NAV only) BACEN BLOKR BEKKI	
Huntavilla (HSV)	FAM J137 LIT J180 SWB DAS-STAR DENNT DARCY DREGS DONVE BWG	
Huntsville (HSV) Hyannis (HYA)	EBAKE WISMO POSTS PADDE SVM DKK ALB ENE	
пуанны (пта)		
Indianapolis (IND)	LFV EARND ELANR EMMLY JAKKS	
Jacksonville (JAX)	DENNT DARCY DREGS DUMGE SWAPP ATL AMG	
Jacksonvine (JAX)	ALMA-STAR	
Kennedy (JFK)	DUFEE ELX HAAKK DOXXY SOSIC JHW J70 LVZ	
Neimedy (3114)	LENDY-STAR	
Knoxville (TYS)	EARND ELANR EMMLY ETAME EMEGE J43 VXV	
La Guardia (LGA)	MOBLE ADIME GERBS J146 ETG MILTON-STAR	
Louisville (LOU)	DENNT DARCY DREGS DUMGE CHERI	
Manchester (MHT)	EBAKE WISMO POSTS PADDE SVM DKK ALB EEN.	
Memphis (MEM)	BACEN BLOKR BEKKI FAM ARG GILMORE-STAR	
	or	
	CMSKY CARYN CYBIL PXV WLDER-STAR	
Miami (MIA)	DENNT DARCY DREGS DUMGE SWAPP ATL SZW	
	J43 PIE CYPRESS-STAR	
	or	
	(Turbojets-GPS or DME/DME-IRU equipped)	
	DENNT DARCY DREGS DUMGE SWAPP ATL J89	
	SSCOT (RNAV)-STAR	
	or	
	(Turbojets–GPS or DME/DME–IRU equipped)	
	GUIDO J73 SZW SSCOT (RNAV)-STAR	
	or	
	(Turbojets–GPS or DME/DME–IRU equipped) EON	
	DNV TTH IUU J99 VXV J46 AMG TAY SSCOT	
	(RNAV)-STAR	
	Or	
	EON DNV TTH SWAPP ATL SZW J43 PIE	
Minneaudia (MCD)	CYY-STAR	1000 0100
Minneapolis (MSP) Nashville (BNA)	PLL PLL275065 ALO KASPR-STAR CMSKY CARYN CYBIL PXV CCT HEHAW-STAR	1200-0400
Niagara Falls (IAG)	EBAKE WISMO POSTS PADDE SVM YXU	
Newark (EWR)	DUFEE ELX HAAKK DOXXY SOSIC KEEHO J584	
Newark (LWIT)	SLT FOM WILLIAMSPORT-STAR	
New Orleans (MSY)	BACEN BLOKR BEKKI ENL J71 MEM J35 MCB	
non chedic (iic.)	RYTHM-STAR	
	or	
	EARND ELANR EMMLY ERECO IIU RYANS	
Norfolk (ORF)	EARND ELANR EMMLY ETAME EMEGE FLM J24	
	MOL TERKS-STAR	
Newburgh (SWF)	DUFEE ELX HAAKK DOXXY SOSIC JHW ITH DNY	
	V483 FILPS	
New Haven (HVN)	DUFEE ELX HAAKK DOXXY SOSIC JHW RKA	
	DENNA-STAR	

		Times
Terminals	Route	(UTC)
Orlando (MCO/ORL)	DENNT DARCY DREGS DUMGE SWAPP ATL J89 OTK PIGLT (RNAV)-STAR	
	or DENNT DARCY DREGS DUMGE SWAPP ATL	
	LEESE-STARor	
	DENNT DARCY DREGS DUMGE SWAPP ATL J89	
	OTK LEESE-STAR	1100-0400
Philadelphia (PHL)	MOBLE ADIME GERBS J146 CXR EWC JST	
Phoenix (PHX)	BUNTS-STAR MZV J18 FTI J19 ZUN EAGUL (RNAV)-STAR	1200-0400
	or	
	MZV LMN J64 HLC LAA J102 GUP EAGUL (RNAV)-STAR	
Pittsburgh (PIT)	MOBLE ADIME OTENS ANEWA RIEKE DJB ACO	
g ( /	CUTTA-STAR	
Portland (PWM)	EBAKE WISMO POSTS PADDE SVM DKK ALB CON	
	PARSOor	
	MOBLE ADIME GERBS J146 CXR EWC JST SIE	
Providence (PVD)	DUFEE ELX HAAKK DOXXY SOSIC JHW J82	
Deletab (Decaberos (DDII)	MEMMS J522 HNK TEDDY-STAR	
Raleigh/Durham (RDU)	EARND ELANR EMMLY ETAME EMEGE FLM BKW ROA SOUTH BOSTON-STAR	
Richmond (RIC)	EARND ELANR EMMLY ETAME EMEGE FLM J24	
	FAK	
Roanoke (ROA)	EARND ELANR EMMLY ETAME EMEGE FLM	
Rochester (ROC)	DUFEE ELX HAAKK DOXXY SOSIC COHOW DKK BUF	
Saint Petersburg/Clearwater (PIE)	CMSKY CARYN CYBIL PXV J73 SZW	
San Juan (TJSJ)	DARBS-STAR MOBLE ADIME GERBS J146 CXR EWC JST SIE	
Sarasota/Bradenton (SRQ)	CMSKY CARYN CYBIL PXV J73 SZW CLAMP-STAR	
Syracuse (SYR)	EBAKE WISMO POSTS PADDE SVM DKK	
Tampa (TPA)	CMSKY CARYN CYBIL PXV J73 SZW	
	DARBS-STAR	
	or CMSKY CARYN CYBIL PXV J73 SZW FOOXX	
	(RNAV)-STAR	
Washington Dulles (IAD)	MOBLE ADIME OTENS ANEWA RIEKE DJB J34 AIR	
	MGW MGW121 VERNI ESL ROYIL-STAR	
	(GPS or DME/DME-IRU equipped) MOBLE ADIME	
	OTENS ANEWA RIEKE DJB J34 AIR MGW VERNI	
	ESL SHNON (RNAV)-STAR	
Washington Natl (DCA)	MOBLE ADIME OTENS ANEWA RIEKE DJB J34	
	BUCKO BUCKO-STAR	
	MOBLE ADIME OTENS ANEWA RIEKE DJB J34	
	SHAAR WZRRD-STAR	
	or (GPS OR DME/DME-IRU equipped) MOBLE ADIME	
	OTENS ANEWA RIEKE DJB J34 SHAAR ELDEE	
	(RNAV)-STAR	
White Plains (HPN)	DUFEE ELX HAAKK DOXXY SOSIC JHW ITH DNY VALRE-STAR	
Wilkes-Barre/Scranton (AVP)	DUFEE ELX HAAKK DOXXY SOSIC JHW J106 LVZ	
Windsor Locks (BDL)	DUFEE ELX HAAKK DOXXY SOSIC JHW J82 WILET	
	SWEDE-STAR	
CINCINNATI (CVG)	(DNAV anti-) DOOKT (DNA) () DD DOOKT CADDE	
Albany (ALB)	(RNAV only) ROCKT (RNAV)-DP ROCKT CADRE	
Allentown (ABE)	AHTIY PSB(RNAV only) ROCKT (RNAV)-DP ROCKT CADRE	
	AHTIY JST HAR	

Effective Times

Terminals	Route	Times (UTC)
Atlanta (ATL)	(RNAV only) BLUEGRASS-DP BWG ERLIN	(0.0)
	(RNAV)-STAR	
Baltimore (BWI)	(all others) BLUEGRASS-DP BWG ROME-STAR V128 YRK HVQ J8 CSN OTT-STAR	
	or (GPS or DME/DME-IRU equipped) V128 YRK HVQ	
Pirmingham (PHM)	J8 CSN RAVNN (RNAV)-STAR	
Birmingham (BHM) Boca Raton (BCT)	BLUEGRASS-DP TRFWA LVT SYI VUZ (GPS or DME/DME-IRU equipped)	
	BLUEGRASS-DP TRFWA NOTWO WALET HITTR LATHY PRRIE (RNAV)-STAR	
	(GPS or DME/DME-IRU equipped)	
	BLUEGRASS-DP HYK VXV J43 ATL J89 OTK	
Boston (BOS)	PRRIE (RNAV)-STAR(RNAV only) ROCKT (RNAV)-DP ROCKT CADRE	
	AHTIY PSB HNK ALB GDM GARDNER-STAR	
Chicago O'Hare (ORD)	(Advanced Nav only) MIE MZZ ROYKO-STAR or	
	(Non-Advanced Nav only) DQN FWA KNOX-STAR or	
Dallas/Fort Worth (DFW)	DQN FWA WATSN (RNAV)-STARIIU PXV J131 LIT BYP	
Fort Lauderdale (FLL)	(GPS or DME/DME–IRU equipped)	
	BLUEGRASS-DP TRFWA NOTWO OTK JINGL (RNAV)-STAR	
	or (all others) BLUEGRASS-DP HYK VXV J43 ATL J89 HITTR J75 FORTL-STAR	
Fort Myers (FMY)	(Turbojets-GPS or DME/DME-IRU equipped) HYK VXV J43 SZW TYNEE (RNAV)-STAR	
Fort Myers (RSW)	(GPS or DME/DME-IRU equipped) HYK VXV J43	
Harrisburg (MDT)	SZW TYNEE (RNAV)-STAR (RNAV only) ROCKT (RNAV)-DP ROCKT CADRE AHTIY JST HAR	1100-0300
Houston (HOU)	(GPS or DME/DME-IRU equipped) LIT J180 SWB ROKIT (RNAV)-STAR	
	or (Non-advanced NAV only) LIT J180 SWB	
	DAS-STAR	
Houston (IAH)	(Turbojets-GPS or DME/DME-IRU equipped) LIT J180 SWB TXMEX (RNAV)-STAR	
	or (Non-advanced NAV only) LIT J180 SWB	
Jackson (JAN)	DAS-STAR BLUEGRASS-DP TRFWA LVT SYI VUZ JAN	
La Guardia (LGA)	(RNAV only) ROCKT (RNAV)-DP ROCKT CADRE	
Manchester (MHT)	AHTIY PSB MILTON-STAR(RNAV only) ROCKT (RNAV)-DP ROCKT CADRE	1000–1800
Marco Island (MKY)	AHTIY PSB ALB EEN HYK VXV J43 SZW PIKKR (RNAV)–STAR	
Miami (MIA)	(Turbojets-GPS or DME/DME-IRU equipped) BLUEGRASS-DP TRFWA NOTWO SZW SSCOT	
	(RNAV)-STAR	
	(all others) BLUEGRASS-DP HYK VXV J43 ATL SZW J43 PIE CYY-STAR	
Mobile (MOB)	BLUEGRASS-DP TRFWA LVT SYI VUZ SJI	
Naples (APF)	HYK VXV J43 SZW PIKKR (RNAV)-STAR ROD J29 J584 SLT FQM-STAR	
Newark (EWR) Newburg (SWF)	(RNAV only) ROCKT (RNAV)-DP ROCKT CADRE	
New Orleans (MSY)	AHTIY PSB J49 HNK DNY V483 FILPS BLUEGRASS-DP TRFWA LVT SYI VUZ J22 MEI	
	RYTHM-STAR	1100 0300
Orlando Exec (ORL)	HYK VXV J99 IRQ J85 AMG LEESE-STAR	1100-0300

Tourningle	Pauta	Times
Terminals	Route or	(UTC)
	(GPS or DME/DME-IRU equipped) HYK VXV J99 IRQ J85 AMG SHEMP MTATA PIGLT	
Orlando Intl (MCO)	(RNAV)-STAR HYK VXV J99 IRQ J85 AMG LEESE-STAR	1100-0400 1100-0300
	or (GPS or DME/DME-IRU equipped) HYK VXV J99	
Philadelphia (PHL)	IRQ J85 AMG BUGGZ (RNAV)-STAR(RNAV only) ROCKT (RNAV)-DP ROCKT CADRE	1100-0400
Phoenix (PHX)	AHTIY JST BUNTS-STARFAM J78 ABQ J18	
	or	
Portland (PWM)	FAM J78 IRW J74 SJN J18 (RNAV only) ROCKT (RNAV)-DP ROCKT CADRE AHTIY PSB J49 ALB ENE	
Providence (PVD)	(RNAV only) ROCKT (RNAV)-DP ROCKT CADRE	
Occasion (Baseloutes (ODO)	AHTIY PSB J49 HNK TEDDY-STAR	
Sarasota/Bradenton (SRQ) Tampa (TPA)	HYK VXV J43 SZW CLAMP-STAR HYK VXV J43 SZW DARBS-STAR	
Tumpa (1177)	or	
	(GPS or DME/DME-IRU equipped) HYK VXV J43	
	SZW FOXXX (RNAV)–STAR	
Washington Dulles (IAD)	V128 YRK HVQ ROYIL-STAR	
	V128 YRK HVQ SHNON (RNAV)-STAR	
Washington Natl (DCA)	V128 YRK HVQ WZRRD-STAR	
	V128 YRK HVQ ELDEE (RNAV)-STAR	
West Palm Beach (PBI)	(GPS OR DME/DME-IRU equipped) BLUEGRASS-DP TRFWA NOTWO OTK WLACE	
	or	
	(GPS or DME/DME-IRU equipped) BLUEGRASS-DP HYK VXV J43 ATL J89 OTK WLACE	
Wilkes Barre/Scranton (AVP)	(RNAV only) ROCKT (RNAV)-DP ROCKT CADRE AHTIY PSB LVZ	
Windsor Locks (BDL)	(RNAV only) ROCKT (RNAV)-DP ROCKT CADRE	
	AHTIY PSB RKA SWEDE SWEDE-STAR	
From LUNKEN (LUK) only:	(PNAV anly) POCKT (PNAV) DR POCKT CARRE	
Albany (ALB)	(RNAV only) ROCKT (RNAV)-DP ROCKT CADRE AHTIY PSB	
Boston (BOS)	(RNAV only) ROCKT (RNAV)-DP ROCKT CADRE	
	AHTIY PSB HNK ALB GDM GARDNER-STAR	
La Guardia (LGA)	(RNAV only) ROCKT (RNAV)-DP ROCKT CADRE	
Manchester (MHT)	AHTIY PSB MILTON-STAR(RNAV only) ROCKT (RNAV)-DP ROCKT CADRE	1000–1800
Wallenester (WITT)	AHTIY PSB ALB EEN	
Newburgh (SWF)	(RNAV only) ROCKT (RNAV)-DP ROCKT CADRE	
D	AHTIY PSB J49 HNK DNV V483 FILPS	
Philadelphia (PHL)	(RNAV only) ROCKT (RNAV)-DP ROCKT CADRE AHTIY JST BUNTS-STAR	
Providence (PVD)	(RNAV only) ROCKT (RNAV)-DP ROCKT CADRE	
Portland (PWM)	AHTIY PSB J49 HNK TEDDY-STAR (RNAV only) ROCKT (RNAV)-DP ROCKT CADRE	
	AHTIY PSB J49 ALB ENE	
Wilkes Barre/Scranton (AVP)	(RNAV only) ROCKT (RNAV)-DP ROCKT CADRE AHTIY PSB LVZ	
Windsor Locks (BDL)	(RNAV only) ROCKT (RNAV)-DP ROCKT CADRE AHTIY PSB RKA SWEDE SWEDE-STAR	
CLEVELAND METRO (CLE, CGF, BKL,		
LNN, LPR) Atlanta (ATL)	(RNAV only) DJB DJB173 HERAK APE035 APE	
	J186 SOT ODF FLCON (RNAV)-STAR	
	or (all others) DJB DJB173 HERAK APE035 APE	
	J186 SOT ODF WHINZ-STAR	

Effective Times (UTC)

Terminals	Route
Battle Creek (BTL) Birmingham (BHM) Boca Raton (BCT)	AMRST-DP VWV  DJB DJB173 HERAK APE035 APE J186 BULEY (GPS or DME/DME-IRU equipped) DJB DJB173  HERAK APE035 APE J83 SPA J85 TAY PRRIE (RNAV)-STAR
Charleston (CHS)	DJB DJB173 HERAK APE035 APE J186 BULEY DJB DJB173 HERAK APE035 APE DJB DJB173 HERAK APE035 APE HVQ HMV JOHNS (RNAV)-STAR
Chicago Midway (MDW)	AMRST-DP VWV GSH GSH-STAR AMRST-DP VWV ZANLA WATSON (RNAV)-STAR or
Chicago Rockford (RFD)	AMRST-DP VWV OXI KNOX-STAR
Dallas/Fort Worth (DFW)	(all others) DJB DJB173 HERAK APE035 APE CINCE-STAR OBRLN-DP RID RID234/40 PXV LIT
Denver (DEN)Elkhart (EKM)	BONHAM-STAR  AMRST-DP VWV GSH  AMRST-DP VWV GSH
Fort Lauderdale (FLL)	DJB DJB173 HERAK APE035 APE J83 SPA J85 TAY J75 HITTR PIE FORTL-STAR or (GPS or DME/DME-IRU equipped) DJB DJB173 HERAK APE035 APE J83 SPA J85 TAY J75
Fort Myers (FMY)	JINGL (RNAV)-STAR DJB DJB200 APE021 APE J186 J91 VXV J43 SZW TYNEE (RNAV)-STAR
Fort Myers (RSW)	(GPS OR DME/DME-IRU equipped) DJB DJB173 HERAK APE035 APE J186 J91 VXV J43 SZW TYNEE (RNAV)-STAR
Fort Wayne (FWA)	OBRLN-DP FWA
Grand Rapids (GRR)	(RNAV only) ALPHE-DP ALPHE  DJB DJB173 HERAK APE035 APE J186 BULEY (GPS or DME/DME-IRU equipped) OBRLN-DP RID RID234/40 PXV LIT J180 SWB ROKIT
Houston (IAH)	(RNAV)-STAR
Jacksonville (JAX)	(Turbojets-GPS or DME/DME-IRU equipped) OBRLN-DP RID234/40 PXV LIT J180 SWB TXMEX (RNAV)-STARDJB DJB173 HERAK APE035 APE J83 SPA J85
Kalamazoo/Battle Creek (AZO) Kansas City (MCI) Kennedy (JFK) La Guardia (LGA) Knoxville (TYS) Las Vegas (LAS)	AMG ALM-STAR
Lewisburg (LWB) Lexington (LEX) Little Rock (LIT) Los Angeles (LAX) Louisville (SDF)	AMRST-DP VWV GSH

<b>*</b>	P	Times
Terminals	Route	(UTC)
Minneapolis (MSP)	(RNAV only) ALPHE-DP ALPHE J70 PMM BAE EAU-STAR	
	or	
	AMRST-DP CRL J34 BAE EAU-STAR	
Madison (MSN)	(RNAV only) ALPHE-DP ALPHE J70 PMM	
Marco Island (MKY)	DJB DJB200 APE021 APE J186 J91 VXV J43 SZW	
	PIKKR (RNAV)-STAR	
	DJB DJB200 APE021 APE J186 J91 ATL J89 J75	
	TEPEE ZEILR-STAR	
Memphis (MEM)	OBRLN-DP RID RID234/40 PXV WLDER-STAR	
Miami (MIA)	DJB DJB173 HERAK APE035 APE J83 SPA J85 TAY J75 HITTR PIE CYPRESS-STAR	
	(/E/G/R/J/L/Q only) DJB DJB173 HERAK APE035 APE J83 SPA J85 TAY J75 RSW DEEDS	
	(RNAV)-STAR	
Milwaukee (MKE)	AMRST-DP CRL CRL316/75 MKG V2 SUDDS	
Myrtle Beach (MYR)	DJB DJB173 HERAK APE035 APE	
Naples (APF)	DJB DJB200 APE021 APE J186 J91 VXV J43 SZW	
Napies (AFI)		
Name (DAIA)	PIKKR (RNAV)-STAR	
Nashville (BNA)	OBRLN-DP IIU GUITR-STAR	
Newark (EWR)	V522 J584 SLT FQM-STAR	
New Orleans (MSY)	OBRLN-DP RID IIU MCB RYTHM-STAR	
Orlando (ORL)	(RADAR and DME required) DJB DJB200 APE021	
	APE J83 SPA CAE SAV OMN CORLL-STAR	1100-0400
Orlando (MCO)	DJB DJB173 HERAK APE035 APE J83 SPA CAE SAV OMN BITHO-STAR	
	or	
	(GPS or DME/DME-IRU equipped) DJB DJB173	
	HERAK APEO35 APE J83 SPA CAE SAV OMN	
	CWRLD (RNAV)-STAR	1100-0400
Palwaukee (PWK)	(RNAV only) ALPHE–DP ALPHE J70 PMM OBK	1100 0400
Philadelphia (PHL)	ACO ACO145 J518 J152 HAR V210 BUNTS	
Phoenix (PHX)	OBRLN-DP VHP STL	
THOUTING (TTIN)	or	
	AMRST-DP VWV GSH	
Raleigh/Durham (RDU)	DJB DJB173 HERAK APE035 APE HVQ BKW ROA	
Raicign/ Damain (RDO)	-	
One Antonio (OAT)	SOUTH- BOSTON-STAR	
San Antonio (SAT)	OBRLN-DP RID RID234/40 PXV J131 LIT J101	
0 5	LFK MARCS-STAR	
San Francisco (SFO)	AMRST-DP VWV GSH	
St. Louis (STL)	OBRLN-DP VHP VANDALIA-STAR	
Sarasota/Bradenton (SRQ)	DJB DJB200 APE021 APE J186 J91 VXV J43 SZW	
Seattle/Tacoma (SEA)	CLAMP-STAR(RNAV only) ALPHE-DP ALPHE J70 PMM	
Seattle/ raddina (SEA)	or	
	(RNAV only) ALPHE-DP ALPHE J34 BAE	
South Bend (SBN)	AMRST-DP VWV GSH	
Tampa (TPA)	DJB DJB173 HERAK APE035 APE J186 J91 VXV	
	J43 SZW DARBS-STAR	
	Or	
	(GPS or DME/DME-IRU equipped) DJB DJB173 HERAK APE035 APE J186 J91 VXV J43 SZW	
	FOXXX (RNAV)-STAR	
Talada (TOL)		
Toledo (TOL)	AMRST-DP VWV	
Toronto (CYYZ)	FAILS V443 DOGGS YXU V098 YWT YWT-STAR	
West Chicago/Dupage (DPA)	AMRST-DP VWV EON JOT	
West Palm Beach (PBI)	(GPS or DME/DME-IRU equipped) DJB DJB173	
	HERAK APE035 APE J83 SPA J85 TAY WLACE or	
	(all others) DJB DJB173 HERAK APE035 APE J83	
	SPA TAY WLACE (RNAV)-STAR	
Wilmington (ILN)	DJB DJB173 HERAK APE035 APE	
COLUMBUS (CMH)		
Dallas/Fort Worth (DFW)	DQN CVG PXV J131 LIT BYP	

<b>Effective</b>
Times
(HTC)

Terminals	Route	(UTC)
Detroit/Wayne (DTW)	DJB DJB314 GEMNI GEMNI-STAR	(UTC)
Houston (HOU)	(GPS or DME/DME-IRU equipped) LIT J180 SWB	
,	ROKIT (RNAV)-STAR	
	or	
	(Non-advanced NAV only) LIT J180 SWB	
	DAS-STAR	
Houston (IAH)	(Turbojets-GPS or DME/DME-IRU equipped) LIT	
	J180 SWB TXMEX (RNAV)-STAR or	
	(Non-advanced NAV only) LIT J180 SWB	
	DAS-STAR	
La Guardia (LGA)	HLG ETG MIP-STAR	
Miami (MIA)	J83 SPA J85 TAY J75 HITTR PIE CYY-STAR	
	or	
	(Turbojets-GPS or DME/DME-IRU equipped) J83	
Newark (EWR)	SPA J85 TAY SSCOT (RNAV)-STAR DJB J29 J584 SLT FQM-STAR	
Washington (IAD)	APE APE100 AIR280 AIR J34 SHAAR ROYIL-STAR	
	or	
	(GPS or DME/DME-IRU equipped) APE APE100	
	AIR280 AIR MGW VERNI ESL SHNON	
	(RNAV)-STAR	
Washington (DCA)	APE APE100 AIR280 AIR J34 SHAAR	
	WZRRD-STARor	
	APE APE100 AIR280 AIR J34 SHAAR ELDEE	
DAYTON (DAY)	(RNAV)-STAR	
DAYTON (DAY) Atlanta (ATL)	(RNAV only) IIU BWG ERLIN (RNAV)-STAR	
Addita (ATE)	or	
	IIU BWG ROME-STAR	
Boca Raton (BCT)	(GPS or DME/DME-IRU equipped) V47 CVG HYK	
	VXV J99 IRQ J85 TAY PRRIE (RNAV)-STAR	1100-0300
Charlotte (CLT)	CVG FLM JOHNS (RNAV)-STAR	0700–2300
Dallas/Fort Worth (DFW) Fort Lauderdale (FLL)	J29 PXV J131 LIT BYPV47 CVG HYK VXV J43 ATL J89 HITTR PIE	
Tort Lauderdale (LL)	FORTL-STAR	
	or	
	(GPS or DME/DME-IRU equipped) V47 CVG HYK	
	VXV J43 ATL J89 OTK JINGL (RNAV)-STAR	
Fort Myers (FMY)	V47 CVG HYK VXV J43 SZW TYNEE (RNAV)-STAR.	
Fort Myers (RSW)	(GPS or DME/DME-IRU equipped) V47 CVG HYK	1100-0300
Houston (HOU)	VXV J43 SZW TYNEE (RNAV)-STAR GPS or DME/DME-IRU equipped) LIT J180 SWB	1100-0300
11003(011 (1100)	ROKIT (RNAV)-STAR	
	or	
	(Non-advanced NAV only) LIT J180 SWB	
	DAS-STAR	
Houston (IAH)	(Turbojets-GPS or DME/DME-IRU equipped) LIT	
	J180 SWB TXMEX (RNAV)-STAR or	
	(Non-advanced NAV only) LIT J180 SWB	
	DAS-STAR	
La Guardia (LGA)	J29 J146 ETG MIP-STAR	
Marco Island (MKY)	V47 CVG HYK VXV J43 SZW PIKKR (RNAV)-STAR	
Miami (MIA)	V47 CVG HYK VXV J43 ATL SZW J43 PIE	
	CYY-STAR	
	(Turbojets-GPS or DME/DME-IUR equipped) V47	
	CVG HYK VXV J43 ATL SZW SSCOT	
	(RNAV)-STAR	
Naples (APF)	V47 CVG HYK VXV J43 SZW PIKKR (RNAV)-STAR	
Orlando Executive (ORL)	V47 CVG HYK VXV J99 IRQ J85 AMG	
	LEESE-STAR	1100-0300
	or	

Towningle	Bouto	Effective Times
Terminals	Route (GPS or DME/DME-IRU equipped) V47 CVG HYK VXV J99 IRQ J85 AMG SHEMP MTATA PIGLT	(UTC)
Orlando Intl (MCO)	(RNAV)-STARV47 CVG HYK VXV J99 IRQ J85 AMG	1100-0400
onando ma (moo)	LEESE-STARor	1100-0300
Sarasota/Bradenton (SRQ)	(GPS or DME/DME-IRU equipped) V47 CVG HYK VXV J99 IRQ J85 AMG BUGGZ (RNAV)-STAR V47 CVG HYK VXV J43 SZW CLAMP-STAR	1100-0400
Tampa (TPA)	V47 CVG HYK VXV J43 SZW DARBS-STAR or (GPS or DME/DME-IRU equipped) V47 CVG HYK	
West Palm Beach (PBI)	VXV J43 SZW FOXXX (RNAV)-STAR(GPS or DME/DME-IRU equipped) V47 CVG HYK	
	VXV J99 IRQ J85 TAY WLACE	1100-0300
	V47 CVG HYK VXV J99 IRQ TAY WLACE (RNAV)-STAR	1100-0300
DETROIT METRO AREA (DTW, DET, YQG, PTK, YIP, ARB)		
Albany (ALB)	MOONN-DP JHW	
Allentown (ABE)	ERRTH-DP ETG RICHMOND-DP RID IIU BWG ROME-STAR or	
	(RNAV only) RICHMOND-DP RID IIU BWG ERLIN (RNAV)-STAR	
Atlantic City (ACY)	ERRTH-DP CXR EWC JST J152 HAR SIE	
Baltimore (BWI)	ACO AIR AIR111 KEMAN WESTMINSTER-STAR	
Bedford (BED)	MOONN-DP JHW J82 ALB	
Binghamton (BGM)	MOONN-DP JHW	
Birmingham (BHM)	RICHMOND-DP RID IIU	
Boston (BOS) Buffalo (BUF)	MOONN-DP JHW J82 ALB GARDNER-STAR (60-170 incl) MOONN-DP BROKK DKK	
Burlington (BTV)	MOONN-DP J29 JHW LAGGS	
Cancun (MMUN)	RICHMOND-DP RID IIU	
Charleston (CHS)	ROSEWOOD-DP ROD FLM HMV	
Charleston (CRW	ACO AIR HVQor	
Charletta (CLT)	(Turboprops/Props-at or below FL210) SCORR CHOOT APE HVQ	
Charlotte (CLT)	(RNAV)-STARJXN V116 LEROY GSH GSH-STAR	
Cincinnati (CVG)	FDY DEBAR-STAR	
(LNN) (LPR)	MAARS HIMEZ HIMEZ-STAR	
Columbus (CMH)	SCOOR CHOOT YOGGI GUNNE-STAR	
Dallas/Fort Worth (DFW)	FORT WAYNE-DP FWA RBS STL RZC FSM BONHAM-STAR	
Denver (DEN)	DUNKS J70 PMM J94 ONL J114 SNY LANDR-STAR	1100-0359
Elmira (ELM) Ft. Lauderdale (FLL)	MOONN-DP JHW ROSEWOOD-DP ROD FLM VXV CRG OMN GISSH-STAR	
	ROSEWOOD-DP ROD FLM VXV CRG OMN FISEL (RNAV)-STAR	
Fort Myers (FMY & RSW)	(Turbojets-GPS or DME/DME-IRU equipped) ROSEWOOD-DP ROD FLM VXV AMG SHFTY (RNAV)-STAR	
Greensboro (GSO)	AIR EKN ROA HENBY	
Greer (GSP)	ROSEWOOD-DP ROD FLM SOT V185 UNMAN	
Houston (HOU)	(GPS or DME/DME-IRU equipped) RID-DP RID PXV J131 LIT J180 SWB ROKIT (RNAV)-STAR	
	or	

T	P. 1	Times
Terminals	Route	(UTC)
	(Non-advanced NAV only) RID-DP RID PXV J131	
Harratan (IAII)	LIT J180 SWB DAS-STAR	
Houston (IAH)	CAVVS VWV ROD J29 PXV J131 LIT J180 CLUBS DAS-STAR	
	Of (Turboists CDC or DME (DME ID)) acuirmed)	
	(Turbojets-GPS or DME/DME-IRU equipped)	
	RID-DP RID PXV J131 LIT J180 SWB TXMEX	
	(RNAV)-STAR	
	(Non-advanced NAV only) RID-DP RID PXV J131	
	LIT J180 SWB DAS-STAR	
Huntsville (HSV)	RICHMOND-DP RID IIU J39 BNA	
Indianapolis (IND)	ANNTS DX0217 FWA071 FWA MIE V14	
maranapons (IVD)	CLANG-STAR	
Jacksonville (JAX)	ROSEWOOD-DP ROD FLM VXV AMG ALMA-STAR	
Kennedy (JFK)	MOONN-DP JHW J70 LVZ LENDY-STAR	
La Guardia (LGA)	ERRTH-DP ETG ETG MILTON-STAR	
Lexington (LEX)	ROSEWOOD-DP ROD CVG CLEGG-STAR	
Los Angeles (LAX)	DUNKS J70 PMM OBK IOW J60 HEC J64	1100-0300
Louisville (SDF)	ROSEWOOD-DP ROD CVG REDSTONE-STAR	
Manchester (MHT)	MOONN-DP JHW J82 ALB EEN	
Memphis (MEM)	RICHMOND-DP CAVVS VWV ROD PXV	
	WLDER-STAR	
Miami (MIA)	(RNAV only) ROSEWOOD-DP ROD FLM VXV CRG	
	OMN HILEY (RNAV)-STAR	
	or	
	ROSEWOOD-DP ROD FLM VXV CRG OMN	
	ANNEY-STAR	
Minneapolis (MSP)	LAYNE DX0006 YQG341 J38 GRB EAU-STAR	
Montreal (CYUL)	TYCOB YQG098 J554 JHW J29 SYR ART ART040	
	J594 MSS FRANX FRANX-STAR	1100-0300
Myrtle Beach (MYR)	ACO AIR EKN RDU	
Nashville (BNA)	RICHMOND-DP RID IIU GUITR-STAR	
Newark (EWR)	ERRTH SLT FQM-STAR	
New Orleans (MSY)	RICHMOND-DP RID IIU J39 BNA MEI	
	RYTHM-STAR	
Niagara Falls (IAG)	MOONN-DP BROKK DKK	
Norfolk (ORF)	ACO AIR MOL TERKS-STAR MOONN-DP JHW J82 ALB GDM	
Norwood (OWD) Orlando Exec (ORL)	CAVVS VWV ROD J43 VXV J99 IRQ J85 AMG	
Olialido Exec (ORE)		
	LEESE-STARor	
	(GPS or DME/DME-IRU equipped)	
	ROSEWOOD-DP ROD J43 VXV J99 IRQ J85 AMG	
	SHEMP MTATA PIGLT (RNAV)-STAR	1100-0400
Orlando Intl (MCO)	ROSEWOOD-DP ROD FLM VXV AMG LEESE-STAR.	1100-0400
chando ma (woo)	or	
	(GPS or DME/DME-IRU equipped)	
	ROSEWOOD-DP ROD FLM VXV AMG BUGGZ	
	(RNAV)-STAR	1100-0400
Philadelphia (PHL)	ERRTH-DP CXR EWC JST BUNTS-STAR	1100 0100
Pittsburgh (PIT)	ACO CUTTA-STAR	
Portland (PWM)	MOONN-DP JHW J82 ALB CAM CON CON061	
	NEETS	
Pottstown (PTW)	ERRTH-SID CXR EWC JST	
Providence (PVD)	MOONN-DP JHW J82 MEMMS J522 HNK	
	TEDDY-STAR	
Raleigh/Durham (RDU)	ACO AIR EKN ROA SOUTH BOSTON-STAR	
Reading (RDG)	ERRTH-DP ETG	
Richmond (RIC)	ACO AIR MOL FAK	
Roanoke (ROA)	ACO AIR EKN ROA	
	or	
	(Turboprops/Props/at or below 230) SCORR	
D. J. (1990)	CHOOT APE ROA	
Rochester (ROC)	MOONN-DP BROKK DKK	

Effective Times (UTC)

	<b>.</b> .	Times
Terminals	Route	(UTC)
San Antonio (SAT)	FORT WAYNE-DP FWA RBS STL RZC MLC ACT MARCS-STAR	
	or	
	RICHMOND-DP RID RID234/40 PXV J131 TXK FZT TNV IDU MARCS-STAR	
San Francisco (SF0)	DUNKS J70 PMM J94 FMG ILA PYE	
Sarasota/Bradenton (SRQ)	ROSEWOOD-DP ROD FLM VXV AMG TAY LAL	
Shreveport (SHV)	RICHMOND-DP RID RID234/40 PXV	
St. Louis (STL)	ANNTS DX0217 FWA071 FWA RBS VLA-STAR	
Syracuse (SYR)	MOONN-DP JHW	
Tampa (TPA)	ROSEWOOD-DP ROD FLM VXV AMG TAY LZARD-STAR	
	or	
	(GPS or DME/DME-IRU equipped) ROD-DP ROD	
	FLM VXV AMG TAY DADES (RNAV)-STAR	
Teterboro (TEB)	MOONN-DP JHW J70 LVZ WILKES BARRE-STAR	
Toronto (CYYZ)	PISTN DX0020 V450 YWT V216	
Trenton (TTN)	ERRTH-DP CXR EWC JST BUNTS-STAR	
Washington Dulles (IAD)	J42 BKW ROYIL-STAR	
	or	
	J42 BKW SHNON (RNAV)-STAR	
	or	
	PXV IIU J8 HVQ ROYIL-STAR	
	PXV IIU J8 HVQ SHNON (RNAV)-STAR	
Washington Natl (DCA)	(all others) ACO AIR J34 BUCKO BUCKO-STAR	
Washington Wat (Dov)	or	
	(GPS or DME/DME-IRU equipped) ACO AIR J34	
	BUCKO ELDEE (RNAV)-STAR	
Westhampton Beach (FOK)	MOONN-DP JHW J70 STW LENDY	
West Palm Beach (PBI)	(GPS or DME/DME-IRU equipped)	
	ROSEWOOD-DP ROD FLM VXV CRG OMN	
	TUXXI-STAR	
	or	
	ROSEWOOD-DP ROD FLM VXV CRG OMN FRWAY	
	(RNAV)-STAR	
White Plains (HPN)	MOONN-DP JHW ITH DNY VALRE-STAR	
Wilkes-Barre (AVP)	MOONN-DP JHW	
Window Looks (RDL)	ERRTH-DP CXR EWC JST BUNTS-STAR	
Windsor Locks (BDL) Winston Salem (INT)	MOONN-DP JHW J82 WILET SWEDE-STAR AIR EKN ROA HENBY	
ELKHART (EKM)	AIR ERN ROATIENDT	
Cleveland Metro Area (CLE) (CGF) (BKL)		
(LNN) (LPR)	LFD CRL HIMEZ-STAR	
EVANSVILLE (EVV)		
Chicago O'Hare (ORD)	(/E/G/R/J/L/Q only) HEVAN MZZ ROYKO	
	(RNAV)-STAR	0000-2359
	or	
	(non-advanced RNAV only) HEVAN MZZ	
	MZZ344/33 OXI KNOX-STAR	0000-2359
FLINT (FNT)		
Atlanta (ATL)	(RNAV-only) VWV RID IIU BWG ERLIN	
	(RNAV)-STAR	
	VWV RID IIU BWG ROME-STAR	
Cincinnati (CVG)	FWA DEBAR-STAR	
FORT WAYNE (FWA)	SED/III OI/III	
Cincinnati (CVG)	FWA DEBAR-STAR	
GRAND RAPIDS (GRR)		
Atlanta (ATL)	IIU BWG ROME-STAR	
	or	
	(RNAV only) IIU BWG ERLIN (RNAV)-STAR	
Cincinnati (CVG)	FWA DEBAR-STAR	
Cleveland Metro (CLE) (CGF) (BKL) (LNN)	000	
(LPR)	GRR HIMEZ-STAR	

Effective Times

Terminals	Route	(UTC)
HAMILTON (CYHM) Detroit/Wayne Area (DET, YIP, PTK,		
CYQG) INDIANAPOLIS (IND)	YXU PICES-STAR	
Dallas/Fort Worth (DFW)	J24 STL RZC FSM BYP	
Houston (HOU)	(GPS or DME/DME-IRU equipped) LIT J180 SWB ROKIT (RNAV)-STAR	
	or (Non-advanced NAV only) LIT J180 SWB	
	DAS-STAR	
Houston (IAH)	(Turbojets-GPS or DME/DME-IRU equipped) LIT J180 SWB TXMEX (RNAV)-STAR or	
	(Non-advanced NAV only) LIT J180 SWB DAS-STAR	
KALAMAZOO/BATTLE CREEK (AZO)	DAS-STAR	
Cincinnati (CVG)	FWA DEBAR-STAR	
LNN, LPR) LANSING (LAN)	LFD CRL HIMEZ-STAR	
Atlanta (ATL)	(RNAV only) VWV RID IIU BWG ERLIN	
	(RNAV)-STARor	
0	VWV RID IIU BWG ROME-STAR	
Cincinnati (CVG)	FWA DEBAR-STAR	
LNN, LPR)  LONDON (CYXU)  Detroit Metro Area (YIP, PTK, DET,	SVM HIMEZ-STAR	
CYQG)	YXU PICES-STAR	
MADISON (MSN) Cleveland Metro Area (CLE, CGF, BKL,		
LNN, LPR)	SQUIB GRR HIMEZ-STAR	
MILWAUKEE (MKE)		
Akron (CAK)	OBK SAMPL ADIME OTENS VWV MFD V8 DALTS	
Albany (ALB) Andrews AFB (ADW)	SQUIB MKG ECK YXU BUFOBK SAMPL ADIME OTENS ANEWA RIEKE DJB J34	
Andrews Ar B (ADW)	SHAAR WZRRD-STAR	
Baltimore (BWI)	OBK SAMPL ADIME OTENS ANEWA RIEKE DJB J34	
	AIR KEMAN WESTMINSTER-STAR	
Boca Raton	(GPS or DME/DME-IRU equipped) OBK J73 SZW	
Dodford (DED)	PRRIE (RNAV)-STAR	
Bedford (BED) Boston (BOS)	SQUIB MKG ECK YXU BUF ALB GDM V431 LOBBY SQUIB MKG ECK YXU BUF ALB GARDNER-STAR	
Buffalo (BUF)	SQUIB MKG ECK YXU	
Burlington (BTV)	SQUIB MKG ECK YXU BUF SYR J29 LAGGS	
Cleveland Metro Area (CLE)	SQUIB LAN SVM HIMEZ-STAR	
Detroit/Wayne (DTW)	BAE POLAR-STAR	
Detroit Metro Area (YIP)	SQUIB LAN SPRTN-STAR	
Flint (FNT) Fort Lauderdale (FLL)	SQUIB OBK J73 SZW JINGL (RNAV)-STAR	1100-0300
	or (GPS or DME/DME-IRU equipped) OBK J73 SZW	
	JINGL (RNAV)-STAR	1100-0300
Fort Myers (FMY)	OBK J73 SZW TYNEE (RNAV)-STAR	1100-0300
Harrisburg (MDT) Houston (HOU)	OBK SAMPL ADIME GERBS J146 CXR EWC HAR (GPS or DME/DME-IRU equipped) LIT J180 SWB ROKIT (RNAV)-STAR	
	or (Non-advanced NAV only) LIT J180 SWB DAS-STAR	
Houston (IAH)	(Turbojets-GPS or DME/DME-IRU equipped) LIT	
	J180 SWB TXMEX (RNAV)-STAR	
	(Non-advanced NAV only) LIT J180 SWB DAS-STAR	

Terminals	Route	Effective Times (UTC)
Hyannis (HYA)	SQUIB MKG ECK YXU BUF ENE LFA	(010)
Jackson (JXN)	SQUIB	
Kansas City (MCI)	DBQ BRAYMER-STAR	
Kansas City (MKC)	DBQ IRK BRAYMER-STAR	
Kennedy (JFK)	SQUIB MKG ECK J16 HANKK J522 HNK IGN KINGSTON-STAR	
La Guardia (LGA)	SQUIB MKG ECK YXU BUF GEE ROCKDALE-STAR .	
Lansing (LAN)	SQUIB	
Mansfield (MFD)	OBK SAMPL ADIME OTENS VWV	
Miami (MIA)	OBK J73 SZW J43 PIE CYY-STARor	1100-0300
	(Turbojets-GPS or DME/DME-IRU equipped) OBK J73 SZW SSCOT (RNAV)-STAR	1100-0300
Montreal (CYUL)	SQUIB MKG ECK YYZ J594 MSS	
Morristown (MMU)	SQUIB MKG ECK J16 HANKK IGN WEARD V489 COATE	
Nashville (BNA)	OBK J73 PXV CCT HEHAW-STAR	
Newark (EWR)	SQUIB MKG ECK J16 HANKK J522 HNK SHAFF-STAR	
Niagara Falls (IAG)	SQUIB MKG ECK YXU	
Orlando Executive (ORL)	OBK J84 DNV TTH BWG GQO ATL J89 OTK	
	LEESE-STARor	
	(GPS or DME/DME-IRU equipped) OBK J84 DNV	
	TTH BWG GQO ATL J89 OTK PIGLT	
	(RNAV)-STAR	1100-0400
Orlando Intl (MCO)	OBK J84 DNV TTH BWG GQO ATL J89 OTK	
	LEESE-STARor	1100-0300
	(GPS or DME/DME-IRU equipped) OBK J84 DNV TTH BWG GQO ATL J89 OTK PIGLT	
	(RNAV)-STAR	1100-0400
Philadelphia (PHL)	OBK SAMPL ADIME GERBS J146 CXR EWC JST BUNTS-STAR	
Pittsburgh (PIT)	OBK SAMPL ADIME OTENS ANEWA RIEKE DJB ACO CUTTA-STAR	
Portland (PWM)	SQUIB MKG ECK YXU BUF ALB CON PARSO	
Pottstown (PTW)	SQUIB ADALE J34 CRL CXR EWC JST	
Providence (PVD)	SQUIB MKG ECK J16 HANKK J522 HNK	
0(Paradoutou (OPO)	TEDDY-STAR	4400 0000
Sarasota/Bradenton (SRQ)	OBK J73 SZW CLAMP-STAR	1100-0300
Syracuse (SYR) Tampa (TPA)	SQUIB MKG ECK YXU BUF OBK J73 SZW DARBS-STAR	1100-0300
Tampa (11 A)	or (GPS or DME/DME–IRU equipped) OBK J73 SZW	1100-0300
	FOXXX (RNAV)—STAR	1100-0300
Teterboro (TEB)	SQUIB MKG ECK J16 HANKK IGN WEARD V489 COATE	
Toledo (TOL)	SQUIB PMM LFD	
Toronto (CYYZ)	SQUIB MKG ECK V216	
Washington Dulles (IAD)	OBK GIJ J146 J34 DJB J34 AIR MGW MGW121	
	VERNI ESL SHAAR ROYIL-STARor	
	OBK SAMPL ADIME OTENS ANEWA RIEKE DJB J34	
	AIR MGW VERNI ESL SHNON (RNAV)-STAR	
Washington Natl (DCA)	OBK GIJ J146 J34 DJB J34 SHAAR WZRRD-STAR. or	
	OBK SAMPL ADIME OTENS ANEWA RIEKE DJB J34	
	SHAAR ELDEE (RNAV)-STAR	
West Palm Beach (PBI)	(GPS or DME/DME-IRU equipped) OBK J73 SZW WLACE	
White Plains (HPN)	SQUIB MKG ECK J16 BUF ITH DNY VALRE-STAR	
Windsor Locks (BDL) Youngstown (YNG)	SQUIB MKG ECK J16 AUDIL SWEDE-STAR OBK SAMPL ADIME GERBS CXR	

Effective Times

Terminals	Route	(UTC)
MOLINE (MLI)		
Cleveland Metro Area (CLE) (CGF) (BKL) (LNN) (LPR)	ELX CRL HIMEZ-STAR	
Detroit/Wayne (DTW)	MKG POLAR-STAR	
Cincinnati (CVG)	(RNAV only) YOW J546 YSO MAULL KODIE CTW TIGRR (RNAV)-STAR	
	(all others) YOW J546 YSO YYZ JHW JHW194 MAULL SLT249 KODIE CTW081 CTW CINCE-STAR	
Detroit/Wayne (DET)	YOW J546	
Kennedy (JFK)	V282 J524 BUGSY J570 ALB IGN IGN-STAR	
La Guardia (LGA) OSHAWA (CYOO)	V282 J542 BUGSY J570 ALB PWL IGN V157	
Detroit Metro Area (DTW, DET, YQG, PTK,	YSN YHM YXU PICES-STAR	
YIP, ARB)  OTTAWA (CYOW)  Detroit Metro Area (DTW, DET, YQG, PTK,		
YIP ARB) PEORIA (PIA)	YOW J546 YSO YXU PICES-STAR	
Detroit/Wayne (DTW) ROCKFORD (RFD)	MKG POLAR-STAR	
Cleveland Metro Area (CLE) (CGF) (BKL)	51.V 051.111157 0715	
(LNN) (LPR)	ELX CRL HIMEZ-STAR	
(LNN) (LPR)	MBS V133 SVM HIMEZ-STAR	
SAINT THOMAS (CYQS)  Detroit Metro Area (DTW, DET, YQG, PTK,		
YIP, ARB)SOUTH BEND (SBN)	AXXIS PICES-STAR	
Atlanta (ATL)	(RNAV only) IIU BWG ERLIN (RNAV)-STAR or	
Cincinnati (CVG)Cleveland Metro Area (CLE) (CGF) (BKL)	IIU BWG ROME-STARFWA DEBAR-STAR	
(LNN) (LPR) TOLEDO (TOL)	LFD CRL HIMEZ-STAR	
Atlanta (ATL) TORONTO (CYYZ)	VWV RID IIU BWG ROME-STAR	
Cincinnati (CVG)	(RNAV only) THORL JHW MAULL KODIE CTW TIGRR (RNAV)-STAR or	
	(all others) THORL JHW JHW194 MAULL SLT249 KODIE CTW081 CTW CINCE-STAR	
Detroit Metro Area (DTW, DET, YQG, PTK,		
YIP, ARB) La Guardia (LGA)	ANCOL V104 YXU PICES-STAR(above 250 kts) V252 GEE RKA-STAR	1100-0300
	(250 kts or less) V252 GEE V14 BEEPS J522	
San Francisco (SEO)	EXTOL RKA292 RKA NOBB-STAR	
San Francisco (SFO)  WATERLOO (CYKF)  Detroit Metro Area (DTW, DET, YQG, PTK,	GRB J106 GEP J70 ABR J32 FMG ILA PYE	
YIP, ARB)	YXU PICES-STAR	

## PREFERRED IFR ROUTES SPECIAL HIGH ALTITUDE DIRECTIONAL ROUTES

		Effective
Terminals	Route	Times (UTC)
Traffic originating east of Chicago Terminating De	nver:	
DJB	J60 IOW DSM J144 OBH J10 LBF	
	SAYGE-STAR	1300-0100
BAE	J16 MCW ONL J114 SNY LANDR-STAR	1200 0100
STL  Traffic overflying Cleveland Center and south of SI	STL J110 GCK J154 RYLIE DANDD-STAR	1300-0100
HPN	(above 250 kts) SLT J190 CFB DNY280 DNY	
	VALRE-STAR	
	or	
	PSB J49 CFB220 CFB DNY280 DNY	
	VALRE-STAR	
	(250 kts or less) SLT J190 CFB DNY280	
	DNY NOBBI-STAR	
	or	
	PSB J49 CFB220 CFB DNY280 DNY	
EWR	NOBBI-STAR ROD J29 J584 FQM-STAR	1100-0300
ROD J29 J70 LVZ LENDY-STAR	1100-0300	1100 0000
	or	
BKW J42 GVE KORRY-STAR	1100-0300	
PHL	ROD J152 HAR V210 BUNTS	1100-0300
	OF BKW J42 GVE DPNT-STAR	1100-0300
PIT	APE CTW V443 WISKE	1100 0000
	or	
	HNN JPU V117 WISKE	
TEB/MMU/CDW/Satellites	(Non-Advanced Nav Aircraft only) ROD J29 JHW J70 LVZ LVZ-STAR	
Traffic overflying Badger VORTAC, BAE to Washing		
BAE	J34 AIR MGW MGW121 VERNI ESL ROYIL-STAR	
	or	
	(GPS or DME/DME-IRU equipped) J34 AIR	
	MGW VERNI ESL SHNON (RNAV)-STAR	
Traffic overflying Gipper VORTAC, GIJ to Washington	on Dulles IAD:	
GIJ	J146 WOOST J34 AIR MGW MGW121 VERNI	
	ESL ROYIL-STAR	
	or (GPS or DME/DME-IRU equipped) J146	
	WOOST J34 AIR MGW VERNI ESL SHNON	
	(RNAV)-STAR	
Traffic overflying Indianapolis Center area eastboo		to IFK:
ABE	ROD CXR J146	10 3111.
BDL	ROD J29 JHW J82 WILET RKA SWEDE-STAR.	
BWI	ROD J152 J162 MGW EMI-STAR	
CEF	ROD J29 JHW J82 ALB ROD J29 JHW J82 J522 HNK IGN V58 V91	
rkg	CCC	
HPN	(above 250 kts) ROD J29 JHW J82 WILET	
	DNY VALRE-STAR)	
	or	
	(250 kts or less) ROD J29 JHW J82 WILET	
ISP	DNY NOBBI-STAR(above 250 kts) ROD J152 J78 PSB J49 HNK	
	J68 V130 TOMES MAD V34 CREAM V16	
	ccc	
	or	
	(250 kts or less) ROD J152 J78 PSB J49	
TEB/MMU/CDW/LDJ	HNK DNY LOVES-STAR ROD J29 JHW J70 LVZ-STAR	
ובטן ויוואוטן טטאין בטז	1.05 323 311W 310 EVZ=31AR	

Effective Times

### **Terminals** Route (UTC) Traffic overflying Indianapolis Center area eastbound originating south and east of a line from DFW to JFK: BKW LDN LDN031 V377 HAR V162 DUMMR. ABE..... BKW J42 OTT SIE ..... ACY BWI ..... BKW J147 CSN OTT-STAR..... BKW J213 V143 V4 AML ..... DCA/ADW ..... BKW WZRRD-STAR..... or BKW ELDEE (RNAV)-STAR ..... BKW J42 GVE ENO-STAR ..... DOV..... HPN..... BKW J42 OOD J150 CYN BOUNO-STAR...... IΔD BKW ROYIL-STAR..... 1100-1830 and 2230-0300 BKW SHNON (RNAV)-STAR ..... 1100-1830 and 2230-0300 GSO J14 CREWE J51 FAK COATT-STAR...... 1830-2230 ٥r GSO J14 CREWE J51 FAK BARIN (RNAV)-STAR..... 1830-2230 LFI ...... BKW J42 MOL J24 HCM ..... BKW J213 FINKS AML259 AML ..... NSF..... PHL ..... BKW J42 GVE DPNT-STAR..... TEB/MMU/CDW/LDJ ..... (Advanced Nav Aircraft only) BKW J42 GVE JAIKE-STAR..... WRI BKW J42 OTT SIE-STAR ..... Traffic overflying Indianapolis Center from Kansas City Center landing at Cleveland Metro: CLE ..... (GPS or DME/DME-IRU equipped) STL J134 JUDDI CVG ABERZ-STAR ..... Traffic overflying Indianapolis Center from Kansas City Center landing at Detroit/Wayne: DTW ..... (GPS or DME/DME-IRU equipped) PXV VHP FWA MIZAR-STAR..... Traffic overflying Indianapolis (ZID) or Cleveland (ZOB) Centers landing in the Washington Metropolitan Area; MGW EMI-STAR ..... 1100-0300 BWI ..... or BKW J147 CSN OTT-STAR..... 1100-0300 DCA..... APE J30 BUCKO BUCKO-STAR ..... 1100-0300 BKW FINKS-STAR..... 1100-0300 1100-0300 (GPS or DME/DME-IRU equipped) BKW ELDEE (RNAV)-STAR..... 1100-0300 APE J30 SHAAR WZRRD-STAR ..... BKW WZRRD-STAR..... APE J30 SHAAR ELDEE ..... BKW ELDEE (RNAV)-STAR ..... APE AIR MGW MGW121 VERNI ESL IAD..... ROYIL-STAR ..... BKW ROYIL-STAR..... HVO ROYIL-STAR ..... or (GPS or DME/DME-IRU equipped) APE AIR MGW VERNI ESL SHNON (RNAV)-STAR ..... BKW SHNON (RNAV)-STAR .....

HVQ SHNON (RNAV)-STAR.....

Effective Times (UTC)

Terminals	Route	
Fraffic overflying Indianapolis Center (ZID) to Chicago O'Hare (ORD)		
ORD	(Non-Advanced Nav Aircraft only) ATL J89 IIU MZZ OXI KNOX-STAR or	
	(Non-Advanced Nav Aircraft only) BNA IIU MZZ OXI KNOX-STAR or	
	(Non–Advanced Nav Aircraft only) FLM J24 BIGXX MZZ OXI KNOX–STAR or	
	(Non-Advanced Nav Aircraft only) IRQ J99 IIU MZZ OXI KNOX-STARor	
	(Non-Advanced Nav Aircraft only, Washington/Baltimore Metro Area Only: BWI, DCA, IAD) ROD J149 FWA KNOX-STAR	

### HIGH ALTITUDE—SINGLE DIRECTION ROUTES

Airway	Segment Fixes	Direction Effective	Times (UTC)
J24/110	Indianapolis, IN to St. Louis, MO	West	1100-0300
J30	Joliet, IL to TRIXY Intn, VA	East	1100-0300
J34	Bellaire, OH to TRIXY Intn, VA	East	1100-0300
J149	Armel, VA to Rosewood, OH	West	1100-0300
J162	Bellaire, OH to Martinsburg, WV	East	1100-0300

### **Q-ROUTES REGULATORY**

## Q1, Q3, Q5, Q7, Q9 and Q11 are preferred single direction (Southbound) Q routes; flight planning Northbound not authorized.

Q routes are RNAV routes that require the use of GNSS or DME/DME/IRU RNAV, unless otherwise indicated. Please note that this section does not apply to Q routes in the Gulf of Mexico. Gulf of Mexico Q routes are explained in the Southeast and South Central A/FD volumes. Q routes listed in this A/FD volume have at least part of one of their leg segments within this volume's area of coverage.

GNSS and DME/DME/IRU RNAV operations are authorized along Q routes at FL 180 and above. GNSS and DME/DME/IRU RNAV MEAs will only be published if above FL 180.

DME facilities that have been assessed for RNAV operations are listed below. Q routes with no DME facilities listed are limited to GNSS RNAV operations only. Those routes will have an enroute chart note "GNSS REQUIRED".

Route	Segment	DME
Q1	ELMAA-ERAVE	BTG, OLM, HOM, HUH, UBG
-	ERAVE-EASON	BTG, OLM, HQM, HUH, LTJ, CVO, DSD, OED, UBG, ONP, EUG
	EASON-EBINY	CVO, DSD, OED, BTG, UBG, ONP, EUG, LMT
	EBINY-ENVIE	CVO, OED, EUG, LMT, RBL, ENI, ONP, FJS
	ENVIE-ETCHY	OED, PYE, OAK, LIN, ECA, LMT, RBL, ENI, SAC, FJS
	ETCHY-POINT REYES	LIN, ECA, RBL, ENI, SAC, OAK
Q2	BOILE-HEDVI	HEC, PDZ, OCN, PMD, LAX, RZS, IPL, TRM, PKE, BLH, EED, BZA, GBN, PXR
	HEDVI-HOBOL	BZA, GBN, BLH, EED, PXR, IPL, TFD, DRK, TUS
	HOBOL-ITUCO	TFD, GBN, BLH, PXR, TUS, CIE, SSO
	ITUCO-NEWMAN	EWM, TFD, PXR, CIE, SSO, TUS, TCS
Q3	FEPOT-FAMUK	OLM, TOU, HQM, CVO, BTG, DSD, LTJ, UBG, ONP, EUG
	FAMUK-FRFLY	BTG, DSD, OED, CVO, EUG, ONP, UBG, RBL, LMT
	FRFLY-FINER	OED, EUG, RBL, LMT, ENI, CVO, FJS
	FINER-FOWND	OED, PYE, ECA, LIN, OAK, ENI, RBL, LMT, SAC, FJS
04	FOWND-POINT REYES	LIN, ECA, PYE, RBL, SAC, ENI
Q4	BOILE-HEDVI HEDVI-SCOLE	HEC, PDZ, OCN, PMD, LAX, RZS, IPL, TRM, PKE, BLH, EED, BZA, GBN, PXR EED, BLH, BZA, GBN, TRM, IPL, TFD
	SCOLE-SPTFR	EED, BLH, BZA, GBN, TRM, IPL, TFD
	SPTFR-ZEBOL	EED, IPL, BZA, GBN, TFD, PXR, BLH
	ZEBOL-SKTTR	PXR, BLH, BZA, GBN, TFD, TUS, SSO, CIE, SVC, TCS
	SKTTR-EL PASO	EWM, CUS, SVC, TCS, SSO, CIE, ELP, DMN, CME
Q5	HAROB-HISKU	OLM, ONP, CVO, EUG, HQM, UBG, BTG, LTJ, DSD, HUH
-	HISKU-HARPR	ONP, CVO, EUG, LTJ, DSD, UBG, BTG, RBL, OED, LMT, FJS, LKV
	HARPR-HOMEG	CVO, EUG, OED, RBL, LMT, ENI, FJS, LKV
	HOMEG-HUPTU	SAC, PYE, LIN, OAK, ECA, LMT, RBL, ENI, OED, FJS
	HUPTU-STIKM	OAK, ECA, PYE, LIN, SAC, ENI, RBL
Q7	JINMO-JOGEN	CVO, HQM, LTJ, UBG, BTG, ONP, IMB, EUG, OLM, DSD, YKM, PDT, SEA
	JOGEN-JUNEJ	LTJ, IMB, UBG, EUG, CVO, RBL, LMT, FMG, DSD, LKV, OED, BTG
	JUNEJ–JAGWA	RBL, LMT, FMG, LIN, SAC, ECA, ENI, MOD, SWR, OAK, LKV, CZQ, AVE, SNS
	JAGWA-AVENAL	OAK, MOD, ECA, EHF, PRB, AVE, SNS, CZQ
Q9	SUMMA-SMIGE	OLM, UBG, SEA, YKM, BTG, ONP, IMB, HQM, PDT, EUG, LTJ, CVO, DSD, OED,
	OMICE CUNDE	EPH, MWH
	SMIGE-SUNBE	IMB, UBG, EUG, IMB, RBL, LMT, FMG, SAC, OED, CVO, LKV, DSD, BTG
	SUNBE-REBRG	RBL, LMT, FMG, SAC, ECA, MVA, CZQ, OAK, EHF, PMD, LKV, LIN, MOD, AVE, OED, SWR
	REBRG-DERBB	CZQ, PMD, EHF, LAX, RZS, AVE, MOD, ECA
Q11	PAAGE-PAWLI	EPH, UBG, CVO, EUG, HQM, YKM, OLM, PDT, BTG, ONP, IMB, LTJ, DSD, LKV,
		OED, SEA
	PAWLI-PITVE	EUG, FMG, SAC, IMB, LKV, OED, DSD, RBL, LMT, CVO, REO
	PITVE-PUSHH	FMG, SAC, LIN, SWR, MOD, OAL, RBL, LKV, LMT, MVA, CZQ
	PUSHH-LOS ANGELES	SAC, ECA, FMG, LIN, OAL, MOD, EHF, LAX, PMD, PDZ, HEC, OCN, CZQ, AVE, RZS
Q13	All segments	None; GNSS required
Q15	All segments	None; GNSS required
Q19	PLESS-NASHVILLE	ENL, GQO, PXV, BNA, IIU, FAM, BWG, CSX
Q20	CORONA-HONDS	CNX, ABQ, ACH, ONM, TXO, LVS, TCC, CME
	HONDS-UNNOS	CNX, INK, CME, TXO, TCC
	UNNOS-FUSCO	FST, ACH, INK, CME, SJT, TXO, TCC
001	FUSCO-JUNCTION	ABI, CWK, CSI, INK, LZZ, JCT, SJT, STV, FST
Q21	JONEZ-RAZORBACK	BYP, EOS, TUL, TXK, ADM, RZC, OKM
Q22	GUSTI-OYSTY OYSTY-ACMES	AEX, DAS, MCB, LLA, BTR, LCH, HRV, LFT, LEV RQR, GCV, MCB, BTR, PCU, GPT, HRV, LEV, SJI
	ACMES-CATLN	SJI, MGM, MCB, BFM, GPT, GCV, HRV, CEW, MVC, PCU, MEI
Q23	FORT SMITH-RAZORBACK	
420	TOTAL SWITTI-MAZONDACK	01(iii, 1120, 200, 102

378 Q-ROUTES

Route	Segment	DME
Q24	LAKE CHARLES-BATON	AEX, DAS, LCH, MCB, LFT, BTR
	ROUGE BATON ROUGE-IRUBE	AEX, LEV, MCB, LCH, RQR, HRV, BTR, GCV, MCB, PCU, SJI, LBY
	IRUBE-PAYTN	GCV, MCB, JYU, PCU, MEI, HRV, CEW, SJI
Q25	MEEOW-WALNUT RIDGE	ELD, MEM, LIT, FAM, RZC
	WALNUT RIDGE-WLSUN	MEM, STL, BWG, PXV, ENL, FAM, ARG, BNA, CSX, TTH
026	WLSUN-POCKET CITY	BWG, PXV, ENL, BNA, TTH
Q26 Q27	WALNUT RIDGE-DEVAC FORT SMITH-ZALDA	LIT, JKS,GQO, MEM, BNA, FAM, ARG, DYR, VUZ, RMG OKM, SGF, RZC, EOS, TUL
Q28	GRAZN-PYRMD	EIC, LIT, ELD, OKM, TXK
	PYRMD-HAKAT	ARG, LIT, FAM, ELD, SGF, RZC, MEM, TXK
	HAKAT-ESTEE	ARG, LIT, FAM, SGF, MEM
Q29	ESTEE-POCKET CITY HARES-MEMPHIS	ARG, CSX, FAM, PXV, ENL, MEM, STL, BWG, TTH, BNA MEM, ARG, LIT, JAN, ELD, SQS
4-0	MEMPHIS-SIDAE	MEM, PXV, BNA, BWG, ARG, ENL
	SIDAE-POCKET CITY	PXV, TTH, BWG, ENL
Q30	SIDON-VULCAN	GLH, MEM, VUZ, JAN, JYU, MEI, MGM, SQS, RMG
Q31	DHART-JODOX	SQS, LIT, TXK
	JODOX–MARVELL MARVELL–TIIDE	SQS, LIT, ELD, MEM, ARG ARG, BWG, PXV, FAM, LIT, MEM, ENL, TTH
	TIIDE-POCKET CITY	BWG, PXV, ENL, TTH
Q32	EL DORADO-GAGLE	AEX, JAN, MEM, SQS, SWB, ELD, LIT, TXK
	GAGLE-CRAMM	JAN, SQS, MEM, ARG, VUZ, BNA, LIT
	CRAMM-NASHVILLE NASHVILLE-SWAPP	BWG, MEM, VUZ, BNA, GQO BWG, IIU, PXV, VXV, BNA, GQO
Q33	DHART-LITTLE ROCK	AEX, ELD, LIT, TXK, SWB, ARG, MEM, SQS
	LITTLE ROCK-PROWL	ELD, SGF, FAM, LIT, ARG, MEM, RZC, CSX, STL
Q34	TEXARKANA-MATIE	LIT, SWB, TXK, BYP, EIC, ELD, SQS
	MATIE-MEMPHIS MEMPHIS-SWAPP	LIT, ARG, MEM, ELD, SQS BWG, ARG, MEM, MKL, SQS,PXV, BNA, GQO, IIU, VXV
Q35	KIMBERLY-NEERO	LTJ, PDT, DSD, IMB, LKV, BOI, REO, BAM, SDO
	NEERO-WINEN	BQU, SDO, BAM, REO, BVL, ILC, DTA, ELY, CDC, MLF, BCE
	WINEN-CORKR	CDC, BCE, BLD, ILC, MLF, TBC, PGS, INW, DRK
036	CORKR-DRAKE RAZORBACK-TWITS	TBC, BCE, BLD, DRK, PGS, FLG, GCN, INW, TFD RZC, MEM, SGF, BUM, TUL, EOS, FAM, ARG, LIT
***	TWITS-DEPEC	MEM, GQO, BNA, BWG, FAM, ARG, PXV, IIU
	DEPEC-NASHVILLE	GQO, BWG, BNA, PXV, IIU
030	NASHVILLE-SWAPP	VXV, BWG, BNA, GQO, PXV, IIU
Q38	ROKIT-INCIN INCIN-LAREY	DAS, LCH, SWB, IAH, LFK, HUB, AEX JAN, MCB, SWB, AEX
	LAREY-BESOM	JAN, JYU, MEI, SQS, VUZ
Q40	ALEXANDRIA-DOOMS	AEX, SWB, LCH, JAN, HEZ, MCB
	DOOMS-WINAP	JAN, SQS, MEI, MCB
042	WINAP-MISLE KIRKSVILLE-STRUK	MEI, VUZ, JYU CID, IOW, UIN, LMN, IRK, BDF, STL, DEC, ENL, CSX
V	STRUK-DANVILLE	ENL, IOW, UIN, BDF, DEC, STL, CSX, SPI, TTH, BVT, JOT, VHP, OXI, ENL, OKK,
		OBK, GIJ, FWA, GSH, IRK
	DANVILLE-MUNCIE	GIJ, SPI, BDF, OBK, OKK, VHP, BVT, DEC, GSH, FWA, JOT, TTH, OXI, ROD, FLM
	MUNCIE-HIDON	FLM, VHP, GSH, TTH, GIJ, OKK, FWA, ROD, OXI, CRL, GSH, APE, DJB, DXO, HNN, AIR, HVQ, CXR, EWC
	HIDON-BUBAA	AIR, APE, HNN, CXR, HVQ, EWC, DJB
	BUBAA-PSYKO	AIR, APE, DJB, CXR, HNN, EWC, SLT, CSN, JHW, ETG, PSB
	PSYKO-BRNAN	PSB, JHW, EWC, AIR, ETG, CSN, EMI, SLT
	BRNAN-MAALS MAALS-SUZIE	EMI, SLT, CSN, EWC, PSB, ETG, SAX, RBV, HNK, HUO, SIE ETG, EMI, CSN, HUO, SIE, JFK, PSB, SLT, HNK
	SUZIE-EAST TEXAS	JFK, EMI, PSB, SLT, HNK, SIE, RBV, SAX, HUO, CYN
	EAST TEXAS-ELIOT	HUO, RBV, EMI, CYN, SAX, JFK, PSB, HNK
Q104	DEFUN-HEVVN	PIE, PZD, CRG, SZW, TAY, JYU, CEW, MGM, OTK, CRG
	HEVVN-PLYER	PIE, ORL, OMN, SRQ, TAY, LAL, CRG, SZW, PZD
	PLYER-SWABE SWABE-ST PETERSBURG	PIE, ORL, OMN, SRQ, TAY LAL, ORL, OMN, SRQ, PHK, PIE
	ST PETERSBURG-	PHK, PBI, SRQ, PIE, VRB, ORL, FLL, LAL, OMN
	CYPRESS	

Route	Segment	DME
Q106	SMELZ-BULZI	LAL, ORL, OMN, PHK, PIE, CRG, VRB, TAY, OTK, PZD, AMG, SZW
	BULZI-DRABK	AMG, PZD, TAY, CRG, SZW, MGM, OTK, JYU, CEW, SJI
	DRABK-GADAY	MGM, PZD, OTK, JYU, SZW, CEW, SJI
Q108	GADAY-CLAWZ	MGM, SJI, CEW, JYU, PZD, OTK, MCN, SZW, LGC, TAY, AMG
Q110	THNDR-JAYMC	SRQ, VRB, PHK, PIE, LAL, VKZ, ORL, PBI
	JAYMC-RVERO	VKZ, VRB, PHK, PIE, LAL, SRQ, ORL, OMN, PBI, DHP
	RVERO-KPASA	OMN, PIE, PBI, SRQ, ORL, LAL
	KPASA-BRUTS	SRQ, VRB, ORL, PHK, TAY, PIE, OMN, OTK, LAL, CRG, SZW, AMG
	BRUTS-GULFR	OMN, AMG, CRG, SZW, PIE, TAY, PZD, OTK
	GULFR-FEONA	TAY, MCN, PZD, CRG, OTK, SZW, AMG, MCN, ATL, MGM
Q112	DEFUN-HEVVN	PIE, OTK, CRG, OMN, LAL, SZW, SRQ, ORL, VRB
	HEVVN-INPIN	JYU, PZD, CEW, SZW, MGM, OTK, TAY, AMG, PIE, CRG
Q116	KPASA-BRUTS	SRQ, VRB, ORL, PHK, TAY, PIE, OMN, OTK, LAL, CRG, SZW, AMG
	BRUTS-GULFR	OMN, AMG, CRG, TAY, LAL, PZD, SZW, OTK
	GULFR-CEEYA	MCN, AMG, PZD, OTK, SZW, TAY
Q118	KPASA-BRUTS	SRQ, VRB, ORL, PHK, TAY, PIE, OMN, OTK, LAL, CRG, SZW, AMG
	BRUTS-LENIE	OMN, AMG, CRG, TAY, LAL, PZD, SZW, OTK, MCN
Q501	VIXIS-GOPHER	ECK, FNT, APN, SSM, GRR, MBL, SAW, BAE, MNM, DLL, AUW, ODI, STE, FGT, EAU,
		DLH, GEP, BRD, MCW, MSP, ASP, TVC, GRB, RWF
	GOPHER-SOBME	FGT, BRD, MCW, GEP, ABR, FAR, DLH, ODI, RWF, FSD
Q502	KENPA-GOPHER	SSM, FNT, ECK, APN, SAW, GRB, BAE, DLL, AUW, ODI, FGT, DLH, EAU, MCW,
		MSP, MNM, ASP, TVC, GEP, RWF, BRD
	GOPHER-SOBME	FGT, DLH, ODI, MCW, ABR, FAR, MSP, GEP, RWF, FSD, BRD
Q504	NOTAP-CESNA	SSM, ECK, APN, GLR, PLN, ISQ, MNM, DLL, RHI, DLH, GEP, FGT, ODI, ASP, TVC,
		SAW, GRB, BRD
	CESNA-HEMDI	ODI, GEP, DLH, FGT, RWF, FAR, AXN, FSD, ABR, DLL, BRD
Q505	OMAGA-RIMBE	SSM, TVC, ASP, SAW, GRB
•	RIMBE-CESNA	SSM, RHI, DLL, DLH, GEP, FGT, TVC, SAW, GRB, BRD, ODI
	CESNA-HEMDI	GEP, DLH, FGT, RWF, FAR, AXN, FSD, ABR, BRD, ODI, GRB

### **RNAV Routing Pitch and Catch Points**

The purpose of this section of the Special High Altitude Routes is to present user routing options for flight within the initial HAR Phase I expansion airspace. Users are able to fly user-preferred routes, referred to as non-restrictive routing (NRR), between specific fixes described by pitch (entry into) and catch (exit out of) fixes in the HAR airspace. Pitch points indicate an end of departure procedures, preferred IFR routings, or other established routing programs where a flight can begin a segment of NRR. The catch point indicates where a flight ends a segment of NRR and joins published arrival procedures, preferred IFR routing, or other established routing programs.

The HAR Phase I expansion airspace is defined as that airspace at and above FL 350 in fourteen of the western and southern Air Route Traffic Control Centers (ARTCCs). The airspace includes Minneapolis (ZMP), Chicago (ZAU), Kansas City (ZKC), Denver (ZDV), Salt Lake City (ZLC), Oakland (ZOA), Seattle Centers (ZSE), Los Angeles (ZLA), Albuquerque (ZAB), Fort Worth (ZFW), Memphis (ZME), and Houston (ZHU). Jacksonville (ZJX) and Miami (ZMA) are included for east-west routes only.

To develop a flight plan, select pitch and catch points based upon your desired route across the Phase I airspace. Filing requirements to pitch points, and from catch points, remain unchanged from current procedures. For the portion of the route between the pitch and catch points, non-restrictive routing is permitted.

Where pitch points for a specific airport are not identified, aircraft should file an appropriate departure procedure (DP), or any other user preferred routing prior to the NRR portion of their routing. Where catch points for a specific airport are not identified aircraft should file, after the NRR portion of their routing, an appropriate arrival procedure or other user preferred routing to their destination.

Additionally, information concerning the location and schedule of Special Use Airspace (SUA) and Air Traffic Control Assigned Airspace (ATCAA) can be found on the Web Site: http://sua.faa.gov/sua/Welcome.do. ATCAA refers to airspace in the high altitude structure supporting military and other special operations. Users are encouraged to file around these areas when they are scheduled to be active, thereby avoiding unplanned reroutes around them.

In conjunction with the HAR program RNAV routes have been established to provide for a systematic flow of air traffic in specific portions of the enroute flight environment. The designator for these RNAV routes begin with the letter Q, for example, Q-501. Where those routes aid in the efficient orderly management of air traffic they will be published as preferred IFR routes.

High Altitude Redesign (HAR) Phase One Expansion Airspace

HAR expansion airspace may pitch

Except as noted, flights entering at the airspace boundary, at the

west longitude to the ZHU southern boundary. 90 degrees west longitude, the 90 degrees south to the ZHU boundary. Then west to except between PMM and GSH, then boundary to the ZME/ZID boundary west longitude from the ZMP/ZAU following the ZME east boundary Vertical Pitch Line: 86 degrees No westbound traffic between PMM and GSH. ZNZ 787 ZDC ZNZ ZIMA ZOB E ZJX IN DEW ZID SSH SWT Sovido Boydo W 98 W 06 GEP CESNA vertical pitch line, or at the fixes ZME S. listed on the following page. ZKC ZHD ZFW ZMP VOZ ZAB ZLC ZLA ZSE ZOA

EC, 17 DEC 2009 to 11 FEB 2010

### HAR Special High Altitude Pitch (entry) Points for Nonrestrictive Routing for Airports Located Outside HAR Phase I Expansion Airspace

Westbound traffic originating outside of HAR airspace entering ZMP, ZAU, ZKC and ZME can begin non-restrictive routing over any of the following pitch points (listed from north to south):

DLH, CESNA, GEP, BAE, MKG, GRR, PMM, GSH, CADIZ, FWA, VHP, FLM, IIU, PXV, SGF, RZC, BNA, SALMS, VUZ, BOYDD,

Traffic originating outside of HAR airspace may also begin Nonrestrictive Routing upon crossing the pitch line depicted on the associated graphic.

### HAR Special High Altitude Pitch Points for Airports Located Within (below) HAR Phase I Expansion Airspace

This section lists pitch points for airports within the HAR Phase I expansion airspace.

Albuquerque ABO, GUP, HANOS or ZUN

Austin ABI, FUZ, JCT, MOP, NAVYS, SJT or TNV

Boca Raton, FL TBIRD KPASA 0118 LENIE

TBIRD KPASA Q116 CEEYA

TBIRD KPASA 0110 FEONA

TBIRD SMELZ 0106 BULZI

TBIRD SMELZ Q106 GADAY

GMN. MARKS Burbank includes

Santa Monica DAG LAS and Van Nuys

HEC EED PMD BLH

IOW, PLL275065, MZV or BAE Chicago Terminal Area

Dallas/Fort Worth Terminal Area ABI, LBB, GTH, CDS, MRMAC, IRW, TUL, MLC, TXK

ELD, SWB

Aircraft destined the Chicago terminal area

Except MDW

EAKER MIDEE BDF BRADFORD-STAR

MLC J105 SGF BDF BRADFORD-STAR

Denver Terminal Area PUB, DVC, DBL, RLG, EKR, LAR, MBW, CYS, BFF, HANKI, NATTI, ASHBY, BELKE,

CABET, WEEDS, OR BINKE

Fort Lauderdale (or) THNDR KPASA Q118 LENIE

Fort Lauderdale Executive

THNDR KPASA Q116 CEEYA

THNDR KPASA Q110 FEONA

THNDR SMELZ 0106 GADAY

THNDR SMELZ Q106 BULZI

Houston Bush LIT, EMG, MLC, JCT

or

Aircraft destined Atlanta Terminal Area LCH Q24 PAYTN HONIE-RNAV STAR

Aircraft joining J37 to the northeast, BPT GUSTI Q22 CATLN

Aircraft joining J42 to the northeast, ELD Q32 J42

Houston Hobby LIT, EMG, MLC, JCT,

or

Aircraft joining J42 to the northeast, ELD Q32 J42

Jacksonville, FL TAY

Kansas City Terminal Area TIFTO, CATTS or KENTN

Los Angeles, includes GMN, RZS Ontario or

DAG LAS or TRM EED

or TRM PKE

Las Vegas DOBNE, MOSBI, NICLE, TRALR or ZELOT

Long Beach includes GMN SNS, EHF, LANDO

Orange County

TRM PKE or

TRM EED

Memphis BNA, HAAWK, SALMS or SQS
Miami Terminal Area WINCO KPASA Q118 LENIE

or

WINCO KPASA Q116 CEEYA

WINCO KPASA Q110 FEONA

or WINCO SMELZ Q106 GADAY

0.

WINCO SMELZ 0106 BULZI

Milwaukee GREAS

Minneapolis Terminal Area\* ONL, ABR, FAR, OBH, OVR, FOD

New Orleans Terminal Area AEX, MEI, SQS, KAPLN

Orlando Terminal Area WEBBS BRUTS Q118 LENIE or

WEBBS GULFR Q116 CEEYA

or

WEBBS BULZI Q106 GADAY

or

WEBBS FEONA

or

WEBBS BULZI

Palm Beach, FL TBIRD KPASA Q118 LENIE

10

TBIRD KPASA Q116 CEEYA or TBIRD KPASA Q110 FEONA

or

TBIRD SMELZ Q106 BULZI or TBIRD SMELZ Q106 GADAY

Palm Springs TRM JOTNU BLD

or

TRM EED or TRM PKE

Phoenix CHILY, CIE, CULTS, RSK, DOVEE, GCN, MESSI, SJN, DRYHT or MOHAK

Portland, OR PDT, TIMEE

384

Salt Lake City HVE, DTA, MLF, BCE, OAL, MTU, BVL, OCS, TWF, DBS, BPI

TCH J56 CHE TCH J173 EKR

Saint Louis VIH, MAP, MYERZ, MCM

HLV MCI

FUZ, SJT, MQP, ABI San Antonio Terminal Area

Aircraft North of LFK, LFK Aircraft South of HUB, ELA

Aircraft South of LFK and North of HUB LCH

San Diego TRM FFD

TRM PKE

TRM JOTNU BLD

San Francisco Bay Area GALLI, INSLO, HAROL JSICA Oakland GALLI, INSLO, HAROL JSICA

San Jose GALLI or INSLO

Seattle BLUIT

Southwest Florida Airports

(RSW/FMY)

JOCKS KPASA 0116 CEEYA JOCKS KPASA Q110 FEONA

JOCKS KPASA Q118 LENIE

JOCKS SMELZ Q106 GADAY

JOCKS SMELZ Q106 BULZI

Tampa Terminal Area FEONA, BULZI

or BRUTS 0118 LENIE

**GULFR Q116 CEEYA** 

BULZI Q106 GADAY

### Catch Points for Airports Located Outside HAR Phase I Expansion Airspace

This section lists exit points for aircraft destined to specific destinations which are outside the HAR Phase I airspace.

Atlanta Terminal Area

Aircraft through ZME airspace from ZKC airspace east of FAM, Pless Q19 BNA

or

Aircraft through ZME airspace from ZKC airspace west of FAM, ARG Q26 DEVAC

MEM

Aircraft through ZME airspace from ZID airspace west of a line from VHP to

Aircraft through ZME airspace from ZID airspace east of a line from VHP to

BWG, BWG

Aircraft through ZME airspace from ZFW airspace, MEM

MEI HONIE (RNAV)-STAR

PATYN HONIE (RNAV)-STAR

<sup>\*</sup>MSP area departures with destinations east of 93 degrees west longitude via preferred IFR routing.

Baltimore–Washington\* GIJ, GEP, FLM, IIU, BAE, VHP, WHETT, BNA or VUZ

Boston\* GEP, CRL, ECK, IIU, BNA or VUZ

Buffalo\* GEP, CRL

Hartford Bradley\* GEP, CRL

Canton-Akron\* GIJ, VHP, GEP

Charlotte BNA, VUZ

Cincinnati Terminal Area BNA, PXV

or

Aircraft north of SLC, JOT

or

Aircraft over or south of SLC, ENL

or

SLC or SFO departures, ENL, JOT

Cleveland Terminal Area\* OBK

Detroit Terminal Area BAE MKG POLAR-STAR

or

VHP FWA MIZAR-STAR

Detroit Young VHP FWA

or

LAN SPRTN-STAR

Indianapolis Terminal Area BIB, SPI, JOT
Louisville ENL. MEM

Newark\* GEP, VHP, FLM, IIU, BNA, VUZ

or

IOW GIJ J554 CRL J584 SLT FQM

New York Kennedy\* GEP, VHP, FLM, IIU, BNA, VUZ

or

DBQ J94 PMM J70 LVZ LENDY-STAR

New York LaGuardia\* GJJ, GEP, VHP, BAE, FLM, IIU, BNA, VUZ
Philadelphia Terminal Area\* GJJ, GEP, VHP, BAE, WHETT, BNA, VUZ

Pittsburgh Terminal Area\* VHP, GIJ, BAE, GEP

Pontiac LFD, LAN, VHP, FWA, GEP

Providence JHW, HEMDI, CESNA, GEP, GRB, TVC, ASP, VHP, IIU, BNA, VUZ

 Raleigh-Durham
 FLM, IIU, BNA, VUZ

 Toronto Terminal Area
 ECK, SVM, SSM, GEP

 Teterboro\*
 GEP, VHP, CRL, BNA, VUZ

Washington Dulles/National\* GIJ, GEP, FLM, IIU, BAE, VHP, WHETT, BNA, VUZ

White Plains\* GEP, VHP, CRL, FLM, IIU, BNA, VUZ

Willow Run\* LAN, LFD, VHP, FWA, GEP

\*Eastbound aircraft over flying ZMP center airspace entering Toronto center airspace, file direct SSM or via J63, J522, Q505, Q504, Q502, Q501

or

Entering ZAU or ZOB airspace from north of DPR J16 MCW, GEP

or

Entering ZAU or ZOB airspace from or south of DPR J16 MCW, CRL.

### Catch Points for Airports Located Within (below) HAR Phase I Expansion Airspace

This section lists exit points for aircraft destined to airports which are below HAR Phase I airspace.

Albuquerque Terminal Area CURLY CURLY-STAR

or

ESPAN FRIHO-STAR

LAVAN LAVAN-STAR

FTI FRIHO-STAR

or

MIERA MIERA-STAR

Austin Terminal Area Aircraft west of a north-south line at LFK. BLEWE

Aircraft east of a north-south line at LFK,IDU

or LLO

Boca Raton, FL CEW DEFUN Q112 INPIN SHDAY (RNAV)-STAR

Aircraft through ZHU remain south of ZME and ZTL airspace

DEFUN 0112 INPIN SHDAY (RNAV)-STAR

Aircraft through ZHU remain south of ZME and ZTL airspace

SZW INPIN SHDAY (RNAV)-STAR

Chicago Midway CVA MOTIF-STAR

PIA MOTIF-STAR

DBQ CVA MOTIF-STAR

LMN MOTIF-STAR

Chicago O'Hare Terminal Area GEP DLL MSN JVL JANESVILLE-STAR

TVC PULLMAN-STAR

FOD DBQ JVL JANESVILLE-STAR

MCW JANESVILLE-STAR

GCK IRK BRADFORD-STAR

Dallas/Fort Worth Terminal Area IRW, LOSZY, FSM, LIT, SQS, MLU, AEX, JUMBO, TQA, TURKI, HEATR

Aircraft through ZME airspace from north and west of PXV, RZC, Q23 FSM

Aircraft through ZME airspace from east of PXV, PXV Q25 MEEOW

Aircraft through ZME airspace from J6 down to, but not including J52, LIT, SQS

Aircraft through ZME airspace from J52 and south of J52, SQS

Denver Terminal Area OATHE DANDD-STAR

HGO QUAIL-STAR

LOPEC-STAR

ALS LARKS-STAR

HBU POWDR-STAR

EKR TOMSN-STAR

CHE TOMSN-STAR

BFF LANDR-STAR

LBF SAYGE-STAR

HCT SAYGE-STAR

RSK LARKS-STAR

LAA QUAIL-STAR

GCK J154 RYLIE DANDD-STAR

OCS J154 ALPOE RAMMS-STAR

YANKI J114 SNY LANDR-STAR

Aircraft filed BIL or east, MBW RAMMS-STAR

Ft Lauderdale or CEW DEFUN Q104 PIE SWAGS (RNAV)-STAR

Ft Lauderdale Executive Aircraft through ZHU airspace remain south ZME and ZTL

airspace

SZW HEVVN 0104 PIE SWAGS (RNAV)-STAR

Houston Bush CRP. CVE. LLO. LUKIY. SAT

Aircraft south and east of LLA, LLA

MISLE Q40 AEX

Aircraft north and east of SJI, SJI

Aircraft east of PXV. PXV 031 DHART SWB

Aircraft north and west of PXV, PROWL Q33 DHART SWB

Houston Hobby CRP, ELLVR, SAT, SWB

Aircraft south and east of GIRLY, GIRLY

Aircraft north and east of SJI, SJI

BESOM Q38 ROKIT ROKIT-STAR

Aircraft east of PXV, PXV Q29 HARES SWB

Aircraft north and west of PXV, PROWL Q33 DHART SWB

Jacksonville **GADAY ZOOSS TAY** 

Aircraft through ZHU airspace remain south of ZME and ZTL

**ZOOSS TAY** 

#### 388 HIGH ALTITUDE REDESIGN (HAR) PHASE 1 RNAV ROUTING

John Wavne-Orange County HEC. PGS. BLD

Aircraft south of TBC from ZAB airspace, HIPPI

Kansas City Terminal Area LMN BRAYMER-STAR

PWE ROBINSON-STAR

EMP JHAWK-STAR

Las Vegas DILCO, LIDAT, IGM

Aircraft over PGA or north of PGA KSINO

Aircraft south of PGA PGS LYNSY

Los Angeles Terminal Area Aircraft North of TBC, HEC, PGS

Aircraft South of TBC from ZAB airspace, HIPPI,

MESSI

CEW DEFUN Q104 CYY DEEDS (RNAV)-STAR Miami Terminal Area

Aircraft through ZHU airspace remain south ZME and ZTL airspace

SZW HEVVN Q104 CYY DEEDS (RNAV)-STAR

Minneapolis Terminal Area Aircraft from north, west, south,

FAR GOPHER-STAR

or

RWF SKETR-STAR or ALO KASPR-STAR

BRD GOPHER-STAR

BAE EAU CLAIRE-STAR

or

FOD TWOLF-STAR

Memphis Terminal Area ARG, BWG, FSM, PXV, LIT, RZC, SQS, VUZ, BNA, GQO, ELD

Naples, FL CEW DEFUN 0104 PLYER PIKKR (RNAV)-STAR

Aircraft through ZHU AIRSPACE remain south of ZME and ZTL

airspace

SZW HEVVN 0104 PLYER PIKKR (RNAV)-STAR

Nashville CCT, GHM, GUITR, TINGS, VOLLS New Orleans Terminal Area BLUEZ, GPT, LCH, MCB, TBD, FATSO

Oakland II A

or

KATTS PAMMY

Aircraft over or south of a line ILC J16 DVC

REANA KATTS PAMMY

Aircraft from north of ILC, JOPER PAMMY

KATTS PAMMY

Aircraft over or south of ILC, REANA KATTS PAMMY

Orlando Terminal Area GADAY Q108 CLAWZ LEESE-STAR

Aircraft through ZHU airspace remain south of ZME/ZTL

airspace

OTK LEESE-STAR

Palm Beach, FL CEW DEFUN 0112 INPIN GULLO (RNAV)-STAR

Aircraft through ZHU airspace remain south of ZME and ZTL

airspace

SZW INPIN GULLO (RNAV)-STAR

Phoenix CORKR DRK

Aircraft from ZDV airspace,

GUP

Aircraft from ZAB airspace,

ZUN, MOHAK, SSO

VYLLA TUS

Phoenix Satellites FLG, SSO, MOHAK

VYLLA, TUS

Portland, OR Terminal Area ARNIT BONVL-STAR

LARNO BONVL-STAR

MOXEE MOXEE-STAR

St. Louis Terminal Area SGF TRAKE-STAR

BUM TRAKE-STAR ANX TRAKE-STAR

LMN IRK RIVRS-STAR

RBS VANDALIA-STAR

Salt Lake City Terminal Area

JNC J12 HELPR SPANE-STAR

EKR MTU SPANE-STAR or

BCE DTA-TCH or MLF DTA-TCH

BVL BONNEVILLE-STAR

or

BYI BEARR-STAR

or

PIH BEARR-STAR

DBS BRIGHAM CITY-STAR

JAC BRIGHAM CITY-STAR BPI BRIGHAM CITY-STAR

OCS BRIGHAM CITY-STAR

San Diego Terminal Area EED, LAX, GBN

Santa Ana HEC, PGS, BLD, HIPPI

San Antonio Terminal Area IDU, CSI, JCT, LLO, CRP, LRD

West of a north-south line at LFK, BLEWE

East of a north-south line at LFK, IDU

#### HIGH ALTITUDE REDESIGN (HAR) PHASE 1 RNAV ROUTING 390

San Francisco FMG GOLDEN GATE-STAR

MVA MODESTO-STAR

ENI GOLDEN GATE-STAR

OAL MODESTO-STAR

South of a line ILC to DVC,

REANA KATTS OAL MODESTO-STAR

San Jose FMG HYP EL NIDO-STAR

OAL HYP EL NIDO-STAR

ENI GOLDEN GATE-STAR

South of a line ILC to DVC,

REANA KATTS KICHI CANDA EL NIDO-STAR

Seattle Terminal Area Aircraft from northeast, southeast, south,

TEMPL GLASR-STAR

SUNED CHINS-STAR

BTG OLMYPIA-STAR

Southwest Florida Airports CEW DEFUN Q104 SWABE JOSFF-STAR

RSW and FMY Aircraft through ZHU airspace remain south of ZME and ZTL

airspace

SZW HEVVN Q104 SWABE JOSFF-STAR

Tampa Terminal Area CEW DEFUN Q104 HEVVN DARBS-STAR Aircraft through ZHU airspace remain south of ZME and ZTL

airspace

SZW DARBS-STAR

Tucson DRK PXR

or

MOHAK GBN

# VFR WAYPOINTS VISUAL FLIGHT RULES (VFR) WAYPOINTS

VFR Waypoint names consist of five letters beginning with "VP". Stand-alone VFR Waypoints are portrayed on VFR Charts using the same four-point star symbol currently used for Instrument Flight Rules (IFR) Waypoints.

VFR Waypoints collocated with Visual Checkpoints (Visual Reporting Points) are portrayed with a Visual Check Point flag. The VFR Waypoint name is shown in parentheses adjacent to the Visual Check Point name.

VFR Waypoint names are not intended to be pronounceable and shall not be used in ATC communications.

CAUTION: GPS accuracy necessitates extra vigilance for other aircraft when navigating near any fix retrieved from a GPS database.

# BALTIMORE-WASHINGTON TERMINAL AREA CHART/FLYWAY CHART

WAYPOINT IDENT	COLLOCATED VFR CHECKPOINT	LOCATION
VPAXI		N38°34.57′/W076°20.38′
VPONX		N39°06.65′/W076°55.92′
VPOOP		N38°56.32′/W076°36.90′
	BOSTON HELICOPTER CHART	
VPBAY		N42°16.17′/W070°49.48′
VPBLT		N42°19.67′/W070°53.40′
VPCGS		N42°22.08′/W071°03.13′
VPEVS		N42°23.52′/W071°04.10′
VPFEN		N42°12.58′/W071°08.88′
VPFRE		N42°25.03′/W071°12.32′
VPGVL		N42°21.88′/W070°52.18′
VPHAM		N42°30.13′/W071°07.15′
VPPIK		N42°20.37′/W071°15.93′
VPQUA		N42°12.10′/W071°04.78′
VPQUB		N42°12.60′/W070°59.83′
VPSPF		N42°24.20′/W071°09.47′
VPTOB		N42°31.42′/W070°59.82′
VPWAN		N42°36.88′/W071°19.45′
	BOSTON TERMINAL AREA CHART	,
VDOOLL		N 4004 0 FO/ (N/070040 04/
VPCOH	Cohasset	N42°13.58′/W070°48.94′
VPCUT	Cuttyhunk Harbor	N41°25.50′/W070°55.03′
VPFRA	Framingham Shopping Center	N42°18.16′/W071°23.65′
VPHOL	Woods Hole	N41°31.06′/W070°40.60′
VPHUL	Hull	N42°18.20′/W070°55.30′
VPLPT	Nantucket Great Point	N41°23.41′/W070°02.78′
VPNED	Needham Towers	N42°18.51′/W071°14.64′
VPPEA	Peabody Shopping Center	N42°32.52′/W070°56.69′
VPROC VPSCI	Rockingham Race Track Scituate	N42°46.29′/W071°13.57′
		N42°11.89′/W070°43.69′
VPTPT	Nantucket Third Point	N41°18.51′/W070°03.37′
VPTUC VPWAK	Tuckernuck Wakefield	N41°18.31′/W070°15.43′
VPWAN	Wang Towers	N42°30.72′/W071°05.24′ N42°36.88′/W071°19.45′
VPWAIN	_	N42 30.00 / WU/1 19.43
VDATO	CHARLOTTE SECTIONAL CHART	NO 4007 07/ 0NO 70004 47/
VPATO VPAVA		N34°37.37′/W076°31.47′
VPAVA		N34°57.00′/W077°16.50′
VPBFE		N32°16.38′/W080°47.50′
VPBRA		N36°13.75′/W076°08.08′
VPGCE		N36°03.90′/W076°36.42′
VPGHI		N35°15.30′/W075°31.25′
VPGIO		N35°32.50′/W076°37.33′
VPKJU		N35°26.58′/W076°10.22′
VPLMN		N34°55.43′/W077°46.42′
VPMAB	ICLE OF DALMC	N34°42.20′/W077°03.50′
VPNPO	ISLE OF PALMS	N32°47.78′/W079°46.45′
VPOKY	<del></del>	N35°06.53′/W075°59.17′
VPREP	<del></del>	N32°33.98′/W080°21.82′
VPRRS		N33°25.45′/W079°07.60′
VPUMO	<del></del>	N35°35.63′/W075°28.08′
VPWZO		N36°00.87′/W075°40.07′
VPZIE		N32°01.62′/W080°53.42′

# CHICAGO SECTIONAL CHART

CHICAGU SECTIONAL CHART			
WAYPOINT IDENT VPCOH	COLLOCATED VFR CHECKPOINT	LOCATION N31°49.35′/W081°51.07′	
DENVER TERMINAL AREA CHART/FLYWAY CHART			
VPBEN		N39°44.28'/W104°26.00'	
VPFTG VPNIC	NORTH INTERCHANGE	N39°44.35′/W104°32.75′ N39°58.90′/W104°59.27′	
Н	OUSTON TERMINAL AREA CHART/FLYV	NAY CHART	
WAYPOINT IDENT	COLLOCATED VFR CHECKPOINT	LOCATION	
	COLLOGATED VFK CHECKFOINT		
VPBWY		N29°46.25′/W095°09.24′	
VPDTN	<del></del>	N29°46.59′/W095°22.01′	
VPGLA		N30°08.32′/W095°06.62′	
VPGLB		N30°07.80′/W094°55.70′	
VPKTY		N29°47.05′/W095°44.92′	
VPPLN		N30°08.80′/W095°50.42′	
VPRSN		N29°30.00′/W095°41.00′	
VPSND		N29°23.13′/W095°28.86′	
VPSNT		N29°49.29'/W094°53.94'	
VPTNE		N29°47.48′/W095°03.34′	
VPTNW		N29°47.06′/W095°33.81′	
VPTRK		N29°24.06′/W095°10.44′	
	JACKSONVILLE SECTIONAL CHA		
VDAFI	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
VPAFI		N31°49.35′/W081°51.07′	
VPAFY		N30°07.00′/W081°21.33′	
VPBEC		N29°46.25′/W081°15.10′	
VPCJA		N29°30.00′/W081°06.00′	
VPCKY	<del></del>	N28°46.50′/W082°34.00′	
VPCNY		N28°30.00′/W080°45.00′	
VPDAD	DADE CITY	N28°22.57′/W082°11.25′	
VPDAR		N31°22.38′/W081°24.13′	
VPDFI		N29°00.17′/W081°20.85′	
VPDUT		N27°37.70′/W082°09.10′	
VPEAR	CLEARWATER BEACH	N27°58.67′/W082°49.83′	
VPEGV		N29°39.97′/W081°24.87′	
VPFFU		N28°57.08′/W081°00.33′	
VPGPE	ST PETE BEACH	N27°43.50′/W082°44.67′	
VPHAA		N30°04.02′/W083°40.02′	
VPHUC		N28°19.87′/W082°43.77′	
VPIWA	MIDWAY	N31°48.33′/W081°25.85′	
VPJMY		N29°26.92′/W081°18.27′	
VPKER	LAKE PARKER	N28°04.00′/W081°56.00′	
VPLEV		N28°48.00′/W080°52.00′	
VPLJA		N29°00.00′/W080°51.00′	
VPMAI	<del></del>	N30°50.02′/W084°56.63′	
VPTLH		N30°32.70′/W083°52.22′	
VPXZY		N29°35.00′/W083°10.00′	
VPYIW VPZIE		N30°42.28′/W081°27.25′ N32°01.62′/W080°53.42′	
VPZIE		, 	
KANSAS CITY SECTIONAL CHART			
VPAGO		N37°50.33′/W090°29.03′	
VPBEK		N37°15.07′/W092°30.67′	
VPDEN		N37°46.75′/W092°19.20′	
VPENE		N37°44.75′/W091°55.78′	
VPESS		N36°59.48′/W091°00.88′	
VPFME		N37°41.00′/W092°38.33′	
VPGXY		N37°15.50′/W091°40.17′	
VPMBE		N37°11.08′/W090°27.92′	
VPMKE		N37°24.47′/W092°40.00′	
VPROV		N38°01.72′/W091°12.81′	
VPUTT		N37°52.05′/W092°01.20′	
511		1101 02.00 / 11002 01.20	

	VIII WALLOINIS	
WAYPOINT IDENT	COLLOCATED VFR CHECKPOINT	LOCATION
VPWOC		N37°18.03′/W092°18.63′
VPWRO		N37°39.12′/W091°45.68′
VPXIZ		N37°26.60′/W092°05.42′
	KANSAS CITY TERMINAL ARE	
VPATN	ATCHISON	N39°33.62′/W095°07.65′
VPBGS	BLUE SPRINGS	N39°01.82′/W094°16.32′
VPBSP	BONNER SPRINGS	N39°03.78′/W094°53.10′
VPCHB	CHOUTEAU BRIDGE	N39°08.77′/W094°32.03′
VPDS0 VPESG	DE SOTO EXCELSIOR SPRINGS	N38°58.68′/W094°58.48′ N39°20.68′/W094°13.77′
VPGTB	GARRETSBURG	N39°40.92′/W094°41.45′
VPLAT	LATHROP WATER TANK	N39°32.87′/W094°20.00′
VPLEN	LENEXA	N38°57.77′/W094°43.68′
VPLVL	LONGVIEW LAKE	N38°54.63′/W094°28.28′
VPMCL	MC LOUTH	N39°11.65′/W095°12.50′
VPNHA	NASHUA	N39°17.83′/W094°34.80′
VPSCX	SPORTS COMPLEX	N39°03.00′/W094°29.02′
VPSKR	SUGAR CREEK REFINERY	N39°07.00′/W094°27.02′
VPSPK	SWOPE PARK	N39°00.47′/W094°31.93′
VPTSK	TWIN STACKS	N39°09.05′/W094°38.22′
VPWOF	WORLDS OF FUN	N39°10.42′/W094°29.12′
	KLAMATH FALLS SECTIONAL	CHART
VPORO	KLAMATII I ALES SECTIONAL	N43°57.38′/W123°02.22′
VPORO		•
	LOS ANGELES HELICOPTER	CHART
VPANA		N33°44.43′/W117°50.03′
VPART	MAGNOLIA	N33°51.45′/W117°58.92′
VPAUT	HWY 91 & 55	N33°50.63′/W117°49.57′
VPBOB		N33°59.60′/W117°21.45′
VPCAR		N33°49.90′/W118°17.23′
VPCNG	CONEJO GRADE US HWY 101	N34°12.54′/W118°59.61′
VPCOR		N33°52.90′/W117°32.95′
VPCRX	<del></del>	N34°01.40′/W117°44.88′
VPCSU	CSU CHANNEL ISLANDS	N34°09.76′/W119°02.53′
VPDOW		N33°56.47′/W118°05.80′
VPELA		N34°00.98′/W118°10.35′
VPETY VPFCB		N33°38.70′/W117°44.12′ N34°02.03′/W118°01.63′
VPFPL	OXNARD FINANCIAL PLAZA	N34 02.03 /W118 01.03 N34°13.71′/W119°10.39′
VPGOL	OANARD FINANCIAL FLAZA	N34°13.71′/W119°10.39° N34°09.33′/W118°17.37′
VPIMP	<del></del>	N33°55.85′/W118°16.85′
VPKAT		N33°48.23′/W117°54.22′
VPKEL		N34°03.92′/W117°48.40′
VPLAC		N34°03.75′/W118°14.93′
VPLLU		N34°03.85′/W117°17.82′
VPLQM	QUEEN MARY	N33°45.17′/W118°11.37′
VPLRT	SANTA ANITA RACE TRACK	N34°08.45′/W118°02.65′
VPLVT	VINCENT THOMAS BRIDGE	N33°44.97′/W118°16.32′
VPMDR		N33°59.27′/W118°23.97′
VPNEW	NEWHALL PASS	N34°20.18′/W118°30.72′
VPNUY		N34°09.63′/W118°28.18′
VPPCH		N33°28.07′/W117°40.32′
VPPKC		N34°03.32′/W118°12.83′
VPPOR		N34°00.10′/W117°50.12′
VPRRT		N33°59.37′/W118°16.83′
VPSEP		N34°05.80′/W118°28.63′
VPSFR		N34°17.45′/W118°28.07′
VPSTC	SATICOY BRIDGE	N34°16.62′/W119°08.34′

N34°13.97′/W118°24.60′

**VPSTK** 

# INC ANCELES SECTIONAL CHART

LOS ANGELES SECTIONAL CHART		
WAYPOINT IDENT	COLLOCATED VFR CHECKPOINT	LOCATION
VPCNG	CONEJO GRADE US HWY 101	N34°12.54′/W118°59.61′
VPCSU	CSU CHANNEL ISLANDS	N34°09.76′/W119°02.53′
VPFPL	OXNARD FINANCIAL PLAZA	N34°13.71′/W119°10.39′
VPSTC	SATICOY BRIDGE	N34°16.62′/W119°08.34′
	LOS ANGELES TERMINAL AREA CHARTA	FLYWAY CHART
VPCNG	CONEJO GRADE US HWY 101	N34°12.54′/W118°59.61′
VPCSU	CSU CHANNEL ISLANDS	N34°09.76′/W119°02.53′
VPGTY	GETTY CENTER	N34°04.84′/W118°28.66′
VPLBP	BANNING PASS	N33°56.05′/W116°59.63′
VPLCC	CHAFFEY COLLEGE	N34°08.87′/W117°34.33′
VPLCP	CAJON PASS	N34°18.07′/W117°27.68′
VPLDL	DISNEYLAND	N33°48.72′/W117°55.13′
VPLDP	DANA POINT	N33°27.62′/W117°42.87′
VPLDS	DODGER STADIUM	N34°04.42′/W118°14.42′
VPLFX	91/605 INTERCHANGE	N33°52.38′/W118°06.08′
VPLGP	GRIFFITH PARK OBSERVATORY	N34°07.10′/W118°18.02′
VPLHF	110/405 FWYS	N33°51.42′/W118°17.10′
VPLHP	HUNTINGTON PIER	N33°39.32′/W118°00.25′
VPLKH VPLLC	KING HARBOR	N33°50.75′/W118°23.88′
VPLLC	L.A. COLISEUM	N34°00.83′/W118°17.27′ N33°50.58′/W117°26.85′
VPLMM	LAKE MATHEWS	N34°26.20′/W118°36.28′
VPLMS	MAGIC MOUNTAIN	N33°43.40′/W117°56.77′
VPLPD	MILE SQUARE PARK	N33°53.40′/W11′ 30.7′ N33°53.40′/W117°38.48′
VPLPP	PRADO DAM	N34°02.13′/W118°32.15′
VPLQM	PACIFIC PALISADES	N33°45.17′/W118°11.37′
VPLRB	QUEEN MARY ROSE BOWL	N34°09.67′/W118°10.05′
VPLRT	SANTA ANITA RACE TRACK	N34°08.45′/W118°02.65′
VPLSA	SANTA ANITA RACE TRACK SANTA ANA CANYON	N33°52.03′/W117°42.68′
VPLSB	SANTA FE FLOOD BASIN	N34°07.72′/W117°57.30′
VPLSC	STATE COLLEGE	N33°52.97′/W117°53.13′
VPLSF	SAN FERNANDO RESERVOIR	N34°17.87′/W118°29.00′
VPLSP	SIGNAL PEAK	N33°36.33′/W117°48.63′
VPLSR	HAWTHORNE & 405 FREEWAY	N33°53.07′/W118°21.13′
VPLSS	SANTA SUSANA PASS	N34°16.00′/W118°38.43′
VPLTW	TUJUNGA WASH & FOOTHILL	N34°16.40′/W118°20.30′
VPLVT	VINCENT THOMAS BRIDGE	N33°44.97′/W118°16.32′
VPLWT	WATER TANK	N34°10.82′/W118°46.27′
VPNEW	NEWHALL PASS	N34°20.18′/W118°30.72′
VPSTC	SATICOY BRIDGE	N34°16.62′/W119°08.34′
	MIAMI SECTIONAL CHAR	PT .
VPACH	HOLLYWOOD BEACH	N26°00.92′/W080°06.93′
VPBOV	HOLLYWOOD BEACH	N27°57.00′/W080°46.75′
VPCLE		N26°27.07′/W082°00.88′
VPCTE		N26°09.28′/W081°20.70′
VPDAD	DADE CITY	N28°22.57′/W082°11.25′
VPDUT	DADE CITT	N27°37.70′/W082°09.10′
VPDZE		N27°19.00′/W080°44.17′
VPEAR	CLEARWATER BEACH	N27°58.67′/W082°49.83′
VPEDY	ANDYTOWN TOLLGATE	N26°08.78′/W080°28.00′
VPFAH		N26°25.40′/W081°29.67′
VPGPE	ST PETE BEACH	N27°43.50′/W082°44.67′
VPHRO	<u> </u>	N27°05.97′/W082°12.20′
VPHUC		N28°19.87′/W082°43.77′
VPIBR		N27°12.47′/W081°40.22′
VPKER	LAKE PARKER	N28°04.00′/W081°56.00′
VPKOE		N24°40.08′/W081°20.55′
VPLYY		N24°49.07′/W080°49.17′
VPMB0	GULFSTREAM PARK	N25°58.57′/W080°08.17′

# EC, 17 DEC 2009 to 11 FEB 2010

N26°28.30′/W080°26.75′

N25°50.67′/W080°55.18′

N25°22.92′/W080°36.58′

N27°03.00′/W080°35.00′

PUMPING STATION

RANGER STATION

VPOBA

VPRBI

VPRNL

VPWMO

# MIAMI TERMINAL AREA CHART/FLYWAY CHART

	MIAMI TERMINAL AREA CHART/FI	LYWAY CHART
WAYPOINT IDENT	COLLOCATED VFR CHECKPOINT	LOCATION
VPACH	HOLLYWOOD BEACH	N26°00.92′/W080°06.93′
VPEDY	ANDYTOWN TOLLGATE	N26°08.78′/W080°28.00′
VPMBO	GULFSTREAM PARK	N25°58.57′W080°08.17′
VPOBA	PUMPING STATION	N26°28.30′/W080°26.75′
VPRBI		N25°50.67′/W080°55.18′
VPRNL	RANGER STATION	N25°22.92′/W080°36.58′
	NEW ORLEANS SECTIONAL	CHART
VPGPT		N30°25.95′/W089°05.62′
VPLIP	PHILLIPS INLET	N30°16.23′/W085°59.25′
VPMAI		N30°50.02′/W084°56.63′
VPMOB		N30°23.00′/W088°31.72′
VPRAM		N30°18.95′/W089°35.88′
VPRER		N30°13.87′/W085°20.67′
VPRIV		N30°54.85′/W087°57.82′
VPSAW		N30°49.65′/W089°07.42′
VPTHR		N30°19.93′/W087°08.50′
	NEW YORK HELICOPTER (	CHART
VPJAY		N40°59.00′/W073°07.00′
VPLYD		N40°57.37′/W073°29.59′
VPROK		N40°52.70′/W073°44.24′
	PHOENIX TERMINAL AREA CHART/	FLYWAY CHART
VPALL	ALLENVILLE	N33°20.97′/W112°35.20′
VPAQU	AQUEDUCT PUMPING STATION	N33°40.05′/W112°41.38′
VPARM	ARROWHEAD MALL	N33°38.52′/W112°13.48′
VPAWG	AHWATUKEE GOLF COURSE	N33°19.98′/W111°59.08′
VPAZM	ARIZONA MILLS	N33°23.43′/W111°57.88′
VPBAR	BARTLETT DAM	N33°49.10′/W111°37.92′
VPCCC	COUNTRY CLUB & CANAL	N33°30.73′/W111°50.37′
VPCNL	CANAL	N33°33.23′/W111°46.89°
VPFRB	FIREBIRD LAKE	N33°16.35′/W111°58.10′
VPFTN	FOUNTAIN HILLS	N33°36.12′/W111°42.72′
VPGLX	GILA CROSSING	N33°16.55′/W112°10.08′
VPGPP	GLENDALE POWER PLANT	N33°33.27′/W112°13.00′
VPMAR	MARICOPA	N33°03.42′/W112°02.88′
VPMHS	MESQUITE HIGH SCHOOL	N33°20.53′/W111°49.58′
VPNRV	NEW RIVER	N33°55.08′/W112°08.45′
VPNTT	NORTH TEST TRACK	N33°03.50′/W111°55.83′
VPPIR	PIR	N33°22.52′/W112°18.90′
VPQTR	QUINTERO GOLF COURSE	N33°49.53′/W112°23.58′
VPRVC	RIO VERDE COMMUNITY	N33°44.37′/W111°39.62′
VPSMC	SOUTH MOUNTAIN COLLEGE	N33°23.02′/W112°02.12′
VPSQP	SQUAW PEAK	N33°32.83′/W112°01.27′
VPSSS	SUPERSTITION SPRINGS MALL	N33°23.50′/W111°41.37′
VPSTN	SANTAN MOUNTAINS	N33°09.23′/W111°40.92′
VPSTT VPZZZ	SOUTH TEST TRACK	N32°56.25′/W111°59.67′ N33°20.18′/W111°26.53′
** ===	ST LOUIS TERMINAL AREA CHART/	
VPAGN	TV ANTENNA	N38°32.08′/W090°22.42′
VPBPE	HOLIDAY OLIOSES	N38°23.80′/W090°20.38′
VPCJY	HOLIDAY SHORES	N38°55.00′/W089°56.00′
VPCOJ	WINFIELD DAM	N39°00.28′/W090°41.23′
VPDFA	JEFFERSON BARRACKS BRIDGE	N38°29.18′/W090°16.47′
VPEAZ	BUSCH STADIUM	N38°37.43′/W090°11.55′
VPEDZ	WATER TANKS	N38°45.30′/W090°34.87′
VPEGR VPEOX	GAS TANKS ST PETERS	N38°35.80′/W090°19.32′ N38°47.17′/W090°39.25′
VPEUX	SI PEIERS	N38-47.17 / W090-39.25

WAYPOINT IDENT	COLLOCATED VFR CHECKPOINT	LOCATION
VPFAI	HOWELL ISLAND	N38°40.00′/W090°43.00′
VPFFY		N38°55.37′/W090°17.30′
VPGPF		N38°35.60′/W090°26.92′
VPGVI		N38°32.30′/W090°27.80′
VPHRQ	CHAIN OF ROCKS BRIDGE	N38°45.88'/W090°10.42'
VPIB0	WATERLOO	N38°20.00′/W090°09.00′
VPJMU	HORSESHOE LAKE	N38°41.00′/W090°05.00′
VPKNY	PACIFIC	N38°29.00′/W090°44.00′
VPLES	ST CHARLES	N38°47.00′/W090°30.00′
VPLIW	SIX FLAGS	N38°30.67'/W090°40.47'
VPLXU	GATEWAY ARCH	N38°37.50′/W090°11.00′
VPNSY	WOOD RIVER REFINERIES	N38°50.00′/W090°05.00′
VPNZY	WENTZVILLE	N38°48.83'/W090°50.98'
VPRAZ	JERSEYVILLE	N39°07.00′/W090°20.00′
VPRMO	FOREST PARK	N38°38.00′/W090°17.00′
VPWKO	COLUMBIA	N38°27.00′/W090°12.00′
VPXXI	MILLSTADT	N38°27.50′/W090°05.68′
VPYID	MOSENTHEIN ISLAND	N38°43.00′/W090°12.25′

# SALT LAKE CITY HELICOPTER CHART

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VPAIR	SALTAIR	N40°44.85′/W112°11.22′
VPBEE	SOUTH INTERCHANGE	N40°38.18'/W111°54.23'
VPBRN	BARN	N40°54.28′/W112°10.15′
VPCAP	STATE CAPITOL	N40°46.67′/W111°53.25′
VPCHS		N40°42.28'/W112°05.92'
VPCOP	BINGHAM COPPER MINE	N40°31.38′/W112°09.00′
VPCWY	CAUSEWAY	N41°05.37'/W112°07.17'
VPCYN	PARLEYS CANYON	N40°42.67′/W111°48.10′
VPFPC	FREE PORT CENTER	N41°05.92'/W112°02.27'
VPFPK	FRANCIS PEAK	N41°01.98′/W111°50.30′
VPGFS	GARFIELD STACK	N40°43.28′/W112°11.88′
VPHVE	SPAGHETTI BOWL	N40°43.50′/W111°54.22′
VPJRT	JORDAN RIVER TEMPLE	N40°35.02′/W111°55.58′
VPKSL	KSL ANTENNA	N40°46.80′/W112°05.80′
VPLGN	LAGOON AMUSEMENT PARK	N40°59.08'/W111°53.57'
VPMDH	MCKAY DEE HOSPITAL	N41°11.50′/W111°57.08′
VPMMT	MICROWAVE TOWERS	N40°48.50′/W111°53.37′
VPMSH		N41°01.67'/W112°02.47'
VPNSL		N40°50.15′/W111°54.90′
VPNTP		N41°03.57'/W112°14.23'
VPOGE	GRAIN ELEVATOR	N41°13.13′/W112°00.45′
VPOPS	POWER STATION	N41°20.38'/W112°02.78'
VPPEN	STATE PRISON	N40°29.88'/W111°53.62'
VPPPT	PROMONTORY POINT	N41°12.28′/W112°25.73′
VPPTM	POINT OF THE MOUNTAIN	N40°27.42′/W111°54.83′
VPPVO	PROVO CANYON	N40°18.77′/W111°39.45′
VPRWY		N40°48.48'/W112°00.33'
VPSLC	I-15/I-80 INTERCHANGE	N40°45.83′/W111°54.85′
VPTIP	SOUTH TIP	N40°50.93′/W112°10.92′
VPWBR	WEBER CANYON	N41°08.17′/W111°54.83′
VPWBT		N40°38.00′/W112°03.33′

# SALT LAKE CITY TERMINAL AREA CHART/FLYWAY CHART

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VPAIR	SALTAIR	N40°44.85′/W112°11.22′
VPBEE	SOUTH INTERCHANGE	N40°38.18′/W111°54.23′
VPBRN	BARN	N40°54.28′/W112°10.15′
VPCAP	STATE CAPITOL	N40°46.67′/W111°53.25′
VPCHS		N40°42.28′/W112°05.92′
VPCOP	BINGHAM COPPER MINE	N40°31.38′/W112°09.00′
VPCVI	CENTERVILLE INTERCHANGE	N40°55.30′/W111°53.43′
VPCWY	CAUSEWAY	N41°05.37′/W112°07.17′
VPCYN	PARLEYS CANYON	N40°42.67′/W111°48.10′
VPFPC	FREE PORT CENTER	N41°05.92′/W112°02.27′
VPFPK	FRANCIS PEAK	N41°01.98′/W111°50.30′
VPGFS	GARFIELD STACK	N40°43.28′/W112°11.88′

WAYPOINT IDENT	COLLOCATED VFR CHECKPOINT	LOCATION
VPHVE	SPAGHETTI BOWL	N40°43.50′/W111°54.22′
VPJRT	JORDAN RIVER TEMPLE	N40°35.02′/W111°55.58′
VPKSL	KSL ANTENNA	N40°46.80′/W112°05.80′
VPLGN	LAGOON AMUSEMENT PARK	N40°59.08'/W111°53.57'
VPMDH	MCKAY DEE HOSPITAL	N41°11.50′/W111°57.08′
VPMMT	MICROWAVE TOWERS	N40°48.50′/W111°53.37′
VPMSH		N41°01.67'/W112°02.47'
VPNSL		N40°50.15′/W111°54.90′
VPNTP		N41°03.57′/W112°14.23′
VPOGE	GRAIN ELEVATOR	N41°13.13′/W112°00.45′
VPOPS	POWER STATION	N41°20.38′/W112°02.78′
VPPEN	STATE PRISON	N40°29.88'/W111°53.62'
VPPPT	PROMONTORY POINT	N41°12.28′/W112°25.73′
VPPTM	POINT OF THE MOUNTAIN	N40°27.42′/W111°54.83′
VPPVO	PROVO CANYON	N40°18.77′/W111°39.45′
VPRWY		N40°48.48′/W112°00.33′
VPSLC	I-15/I-80 INTERCHANGE	N40°45.83′/W111°54.85′
VPTIP	SOUTH TIP	N40°50.93′/W112°10.92′
VPUOU	U OF U EVENTS CENTER	N40°45.73′/W111°50.28′
VPWBR	WEBER CANYON	N41°08.17'/W111°54.83'
VPWBT		N40°38.00′/W112°03.33′
VPZ00	HOGLE ZOO	N40°45.00′/W111°48.95′

# SAN DIEGO TERMINAL AREA CHART/FLYWAY CHART

VPLDP	DANA POINT	N33°27.62′/W117°42.87′
VPLSP	SIGNAL PEAK	N33°36.33′/W117°48.63′
VPOCN		N33°14.15′/W117°26.63′
VPSBC	BARONA CASINO	N32°56.25′/W116°52.60′
VPSBL		N33°05.18'/W117°18.55'
VPSBM	BLACK MOUNTAIN	N32°58.87'/W117°07.00'
VPSCF		N32°48.55′/W117°09.17′
VPSCM	COWLES MOUNTAIN	N32°48.72′/W117°01.97′
VPSCP	CRYSTAL PIER	N32°47.77′/W117°15.42′
VPSCR		N32°39.37'/W117°07.30'
VPSFB	IRON MOUNTAIN	N32°58.25′/W116°57.33′
VPSLJ	LAKE JENNINGS	N32°51.53′/W116°53.28′
VPSMB		N32°45.57′/W117°12.22′
VPSMP		N33°22.70′/W117°36.75′
VPSMS	MOUNT SOLEDAD	N32°50.40′/W117°15.10′
VPSMV		N32°45.75′/W117°09.80′
VPSMW	MOUNT WOODSON	N33°00.52′/W116°58.23′
VPSOP	OTAY MESA PRISON	N32°35.82′/W116°55.28′
VPSOT	LOWER OTAY LAKE	N32°37.73′/W116°55.38′
VPSPL	SOUTH POINT LOMA	N32°39.90′/W117°14.55′
VPSPP	POWER PLANT	N33°08.25′/W117°20.23′
VPSQS	QUALCOMM STADIUM	N32°46.98'/W117°07.23'
VPSRT	DEL MAR RACE TRACK	N32°58.58′/W117°15.95′
VPSSM	SAN MIGUEL MOUNTAIN	N32°41.78′/W116°56.18′
VPSSV	SAN VICENTE ISLAND	N32°55.53′/W116°55.00′
VPSTP	TORREY PINES GOLF COURSE	N32°54.17′/W117°14.68′
VPSVA		N33°11.48′/W117°16.38′

# SAN FRANCISCO SECTIONAL CHART

VPKBG KINGSBURY GRADE N38°58.75′/W119°53.20′

# SAN FRANCISCO TERMINAL AREA CHART/FLYWAY CHART

VPALT	ALTAMONT PASS	N37°44.35′/W121°35.42′
VPANT	ANTIOCH BRIDGE	N38°01.45′/W121°45.02′
VPBBR	BENICIA BRIDGE	N38°02.50′/W122°07.45′
VPCAL	CALAVERAS RESERVOIR	N37°28.16′/W121°48.93′
VPCBT	LAKE CHABOT	N37°43.68′/W122°06.94′
VPCOY	COYOTE HILLS	N37°32.50′/W122°05.06′
VPCQZ	CARQUINEZ BRIDGE	N38°03.66′/W122°13.52′
VPCRL		N37°11.00′/W121°41.06′
VPCRY	CRYSTAL SPRINGS CAUSEWAY	N37°30.56′/W122°21.10′

# **VFR WAYPOINTS**

WAYDON'T IDENT	COLLOCATED MED CHECKDOINT	100471011
WAYPOINT IDENT	COLLOCATED VFR CHECKPOINT	LOCATION
VPCSH	CAL STATE UNIVERSITY	N37°39.52′/W122°03.52′
VPDAM	DEL VALLE DAM	N37°36.91′/W121°44.78′
VPDLR		N37°07.00′/W121°47.06′
VPDUB	DUBLIN	N37°42.06′/W121°55.36′
VPEMB	EMBASSY SUITES	N37°26.05′/W121°53.83′
VPGGF	GOLDEN GATE FIELDS	N37°53.07′/W122°18.71′
VPGIL	GILROY	N37°01.37′/W121°33.99′
VPHHH	HAMILTON	N38°03.58′/W122°30.66′
VPKG0	KG0	N37°31.58′/W122°06.10′
VPLEX	LEXINGTON RESERVOIR	N37°11.66′/W121°59.18′
VPMID	MID-SPAN SAN MATEO BRIDGE	N37°36.28′/W122°11.81′
VPMOR	MORMON TEMPLE	N37°48.46′/W122°11.95′
VPNUM	NUMMI PLANT	N37°29.56′/W121°56.58′
VPPAC		N37°38.00′/W122°32.07′
VPPRU	PRUNEYARD	N37°17.33′/W121°56.01′
VPSAR	SARATOGA	N37°15.26′/W122°02.33′
VPSLA	SLAC/LINEAR ACCELERATOR	N37°24.75′/W122°14.35′
VPSTB	STINSON BEACH	N37°54.45′/W122°40.41′
VPSUN	SUNOL GOLF COURSE	N37°34.85′/W121°53.23′
VPUTC	U.T.C.	N37°13.93′/W121°41.35′
VPWAL	WALNUT CREEK	N37°53.78'/W122°04.30'
VPWAM		N37°30.28'/W122°10.00'
VPWFR	CEMENT PLANT	N37°30.88′/W122°12.26′
TAMPA	/ORLANDO TERMINAL AREA CHART/FLY\	WAY CHART
VPBOV		N27°57.00′/W080°46.75′
VPCNY		N28°30.00′/W080°45.00′
VPDAD	DADE CITY	N28°22.57′/W082°11.25′
VPDFI		N29°00.17′/W081°20.85′
VPDUT		N27°37.70′/W082°09.10′
	-	,

VPBOV		N27°57.00′/W080°46.75′
VPCNY		N28°30.00′/W080°45.00′
VPDAD	DADE CITY	N28°22.57′/W082°11.25′
VPDFI		N29°00.17'/W081°20.85'
VPDUT		N27°37.70′/W082°09.10′
VPEAR	CLEARWATER BEACH	N27°58.67′/W082°49.83′
VPFFU		N28°57.08′/W081°00.33′
VPGPE	ST PETE BEACH	N27°43.50′/W082°44.67′
VPHUC		N28°19.87'/W082°43.77'
VPKER	LAKE PARKER	N28°04.00′/W081°56.00′
VPLEV		N28°48.00′/W080°52.00′
VPLJA		N29°00.00′/W080°51.00′

# **WASHINGTON SECTIONAL CHART**

	 ====
VPACE	 N38°07.82′/W076°48.75′
VPAXI	 N38°34.57'/W076°20.38'
VPBRA	 N36°13.75′/W076°08.08′
VPGCE	 N36°03.90′/W076°36.42′
VPWZO	 N36°00.87′/W075°40.07′

Remarks

# **VOR RECEIVER CHECK**

# VOR RECEIVER CHECKPOINTS AND VOR TEST FACILITIES (VOT)

The use of VOR airborne and ground checkpoints is explained in Aeronautical Information Manual, Basic Flight Information and ATC Procedures.

NOTE: Under columns headed "Type of Checkpoint" & "Type of VOT Facility" G stands for ground. A/ stands for airborne followed by figures (2300) or (1000–3000) indicating the altitudes above mean sea level at which the check should be conducted. Facilities are listed in alphabetical order, in the state where the checkpoints or VOTs are located.

# **ILLINOIS**

# **VOR RECEIVER CHECKPOINTS**

Facility Name (Arpt Name)	Freq/Ident	Type Check Pt. Gnd. AB/ALT	Azimuth from Fac. Mag	Dist. from Fac. N.M.	Checkpoint Description
Centralia (Centralia Muni)	115.0/ENL 110.0/CMI	A/2000 A/2000	027 177	6.1 7.8	Over apch end Rwy 36.  Over grain elevator at  Pesotum.
Champaign (University of Illinois-Willard)	110.0/CMI	G	332	0.9	On runup pad Rwy 14L.
Decatur (Decatur)	117.2/DEC	A/1700	348	5.4	Over apch end Rwy 36.
Galesburg	109.8/GBG	A/3000	237	12	Over railroad bridge.
Jacksonville	108.6/IJX	A/1600	137	11.1	Over railroad crossing 2 NM NW of Franklin.
Joliet (Aurora Muni)	112.3/JOT	A/2500	331	15	Over intersection of rwys.
Joliet (Joliet Rgnl)	112.3/JOT	A/1500	102	6.5	Over centerline of NW end
					of Rwy 04-22.
Lawrenceville (Lawrenceville-Vincennes					-
Intl)	108.8/LWV	G	177	.6	South side of Echo.
Marion (Williamson Co Rgnl)	110.4/MWA	A/1500	287	11	Railroad intersection in town of De Soto.
	110.4/MWA	G	139	.5	On parallel twy to Rwy 29.
Mattoon/Charleston (Coles Co Memorial)	109.4/MTO	G	066	.7	Runup pad Rwy 24. VOR checkpoint unusable.
Moline (Quad City Intl)	114.4/MZV	A/2000	034	9.8	Over intersection of Rwys 05–23, 09–27, 13–31.
Mount Vernon (Mount Vernon)	113.8/VNN	G	223	3.2	At intersection of taxiways B and B2.
Peoria (Greater Peoria RgnI)	115.2/PIA	A/2000	100	4.9	Over intersection Rwys 13–31 and 4–22.
Quincy (Quincy Rgnl-Baldwin Fld)	113.6/UIN	G	029	6.6	On W side of terminal ramp.
Roberts	116.8/RBS	A/2000	151	7.8	Over grain elevator in Paxton, IL.
Rockford (Chicago/Rockford Intl)	110.8/RFD	G	108	5.1	Over intersection of twys A/B/D.
Samsville (Mount Carmel Muni)	116.6/SAM	A/1500	063	18.4	Over intersection of Rwys 04–22 and 13–31.
Troy (St Louis Rgnl)	116.0/TOY	A/1600	322	11	Over intersection of N/S and NW/SE rwys.
Vandalia (Vandalia Muni)	114.3/VLA	A/1700	177	5.8	Over centerline at N end N/S rwy.

# **VOR TEST FACILITIES (VOT)**

Facility Name (Airport Name)	Freq.	Type VOT Facility
Chicago (Midway)	111.0 112.0	G

# VOR RECEIVER CHECK INDIANA

# **VOR RECEIVER CHECKPOINTS**

		Type			
		Check	Azimuth	Dist.	
		Pt.	from	from	
		Gnd.	Fac.	Fac.	
Facility Name (Arpt Name)	Freq/Ident	AB/ALT	Mag	N.M.	Checkpoint Description
Boiler (Purdue Univ)	115.1/BVT	A/1800	286	12	Over water twr in town of Fowler.
Goshen (Goshen Muni)	113.7/GSH	A/2000	090	10.7	Over center of E/W rwy.
Hoosier (Monroe County)	110.2/00M	G	349	.9	On runup pad Rwy 17.
Huntingburg	109.2/HNB	A/2500	010	8	Over water tower S edge Jasper.
Kokomo (Kokomo Muni)	113.5/0KK	G	242	.6	On taxiway A at AER 05.
Marion (Marion Muni)	108.6/MZZ	G	206	.6	Runup Pad Rwy 04
Muncie (Delaware Co-Johnson Fld)	114.4/MIE	A/2500	181	5.8	Over intersection of highway and railroad.
	114.4/MIE	G	328	0.7	On taxiway A-4 on runup area for Rwy 14.
Pocket City (Evansville Rgnl)	113.3/PXV	A/2000	056	13	Over intersection of E/W and NE/SW rwys.
Terre Haute (Sky King)	115.3/TTH	A/2000	300	7	Over intersection of E/W and N/S rwys.

# **VOR TEST FACILITIES (VOT)**

Facility Name (Airport Name)			Remarks
Fort Wayne IntlIndianapolis Intl		G G	

# **MICHIGAN**

# **VOR RECEIVER CHECKPOINTS**

		Type Check Pt. Gnd.	Azimuth from Fac.	Dist. from Fac.	
Facility Name (Arpt Name)	Freq/Ident	AB/ALT	Mag	N.M.	Checkpoint Description
Alpena (Alpena Co Rgnl)	108.8/APN	G	203	1.1	On runup for Rwy 01.
Au Sable (Oscoda-Wurtsmith)	116.1/ASP	G	249	.9	Approach end Rwy 6.
	116.1/ASP	G	063	1.0	Approach end Rwy 24.
Battle Creek (W.K. Kellogg)	109.4/BTL	A/2000	096	11.3	NS and EW highway intersection.
Escanaba	110.8/ESC	A/2500	002	14.5	Over microwave twr 1 NM S of Perkins.
Gaylord (Gaylord Rgnl)	109.2/GLR	G	077	.6	SE corner of ramp.
Grand Rapids (Gerald R Ford Intl)	115.95/GRR	A/2500	231	10	Over intersection of N/S highway & E/W road 1 NM W of Wayland.
Houghton (Houghton Co Meml)	112.8/CMX	A/2300	077	13.5	Over smoke stack.
Kalamazoo (Kalamazoo/Battle Creek Intl)	109.0/AZO	G	167	.7	On twy to Rwy 35.
Lansing (Capital City)	110.8/LAN	G	058	5.4	On Twy C; 500 E of apch end Rwy 06.
Litchfield	111.2/LFD	A/2000	328	17.5	Over intersection of NS/EW expressway.
Manistique (Schoolcraft County)	110.4/ISQ	A/2400	078	13.2	Over railroad intersection.
Muskegon (Muskegon County)	115.2/MKG	A/2000	272	8.4	Over intersection of NW/SE and NE/SW rwys.
Peck (St Clair County Intl)	114.0/ECK	A/2000	166	22.5	Over apch end Rwy 04.

		Type			
		Check	Azimuth	Dist.	
		Pt.	from	from	
		Gnd.	Fac.	Fac.	
Facility Name (Arpt Name)	Freq/Ident	AB/ALT	Mag	N.M.	Checkpoint Description
Pellston (Cheboygan City-County)	111.8/PLN	A/2000	084	6.4	Over center of E/W rwy.
<b>Peliston</b> (Peliston Rgnl Arpt of Emmet Co)	111.8/PLN	G	241	6.4	At intersection of N/S and E/W twys.
Pontiac (Oakland Co Intl)	111.0/PSI	G	113	5.8	On circle on warmup pad apch end Rwy 27L.
	111.0/PSI	G	120	5.0	On circle on warmup pad apch end Rwy 09R.
Saginaw	112.9/MBS	A/1700	058	6.7	Over intersection US 10 and I–75.

# **VOR TEST FACILITIES (VOT)**

Facility Name		Type VOT	
(Airport Name)	Freq.	Facility	Remarks
Detroit City	111.6	G	
Detroit (Detroit Metropolitan Wayne Co.)	109.8	G	

# OHIO

# **VOR RECEIVER CHECKPOINTS**

Facility Name (Airport Name)	Freq/Ident	Type Check Pt. Gnd. AB/ALT	Azimuth from Fac. Mag	Dist. from Fac. N.M.	Checkpoint Description
Buckeye (Port Bucyrus–Crawford Co)	109.8/BUD	A/2500	027	10.5	Over intersection E/W grass strip and Rwy 04–22.
Dryer (Loraine County Rgnl)	113.6/DJB	G	222	1.3	At intersection of taxiway and ramp.
Jefferson (Ashtabula Co)	115.2/JFN	G	067	2.4	On ramp.
Jefferson (Germack)	115.2/JFN	A/2000	278	9.0	At intersection of E/W interstate highway and N-S highway south of town of Geneva Ohio.
Mansfield (Shelby Community)	108.8/MFD	A/2000	277	4.8	Over hangar NW corner of arpt.
Mansfield (Mansfield Lahm Rgnl)	108.8/MFD	G	134	4.7	At intersection of taxiways A and D.
Springfield (Springfield–Beckley Muni)	113.2/SGH	G	050	1.2	On NE taxiway abeam approach end Rwy 24.
Waterville (Fulton Co.)	113.1/VWV	A/1800	295	24.2	Over hangar on WSW side of arpt.
Zanesville (Zanesville Muni)	111.4/ZZV	A/2000	270	5.5	Over water tank.
,	111.4/ZZV	G	028	.5	On taxiway near apch end of Rwy 22.

# VOR RECEIVER CHECK VOR TEST FACILITIES (VOT)

Facility Name		Type VOT	
(Airport Name)	Freq.	Facility	Remarks
Akron Canton Rgnl	110.6	G	
Cincinnati Muni Arpt Lunken Field	108.4	G	
Cleveland Hopkins Intl	110.4	G	
Columbus (Port Columbus Intl.)	111.0	G or	Within 10 NM radius of
		A/2300-5000	airport.
Dayton (James M Cox Dayton Intl.)	111.0	G or	Within a 10 NM radius of
		A/2500-4000	arpt.
Sidney (Sidney Muni)	111 0	A/2500-4000	

# **WISCONSIN**

# **VOR RECEIVER CHECKPOINTS**

			•		
Facility Name (Arpt Name)	Freq/Ident	Type Check Pt. Gnd. AB/ALT	Azimuth from Fac. Mag	Dist. from Fac. N.M.	Checkpoint Description
Eau Claire (Chippewa Valley Rgnl)	112.9/EAU	G	182	2.1	Center of ramp.
Green Bay (Austin Straubel Intl)	115.5/GRB	G	141	4.6	On Twy M1 at Rwy 18R apch end.
Janesville	114.3/JVL	A/1900	287	12.7	Over water tower N of Brodhead.
Janesville (Southern Wisconsin Rgnl)	114.3/JVL	G	035	4.3	On taxiway A1.
Kenosha (Sylvania)	109.2/ENW	A/2100	353	5.9	Over N/S interstate highway bridge over E/W highway N of arpt.
LaCrosse (La Crosse Muni)	108.4/LSE	G	356	1.0	Runup pad AER Rwy 18.
Madison (Dane Co Rgnl/Truax Fld)	108.6/MSN	G	151	0.6	On NE corner air national guard ramp adjacent to taxiway D.
Manitowoc (Manitowoc Co)	111.0/MTW	G	196	0.5	SW corner of terminal ramp.
Oshkosh (Wittman RgnI)	111.8/0SH	G	282	0.6	On taxiway at Rwy 09 apch end
	111.8/OSH	G	173	0.7	On N/S taxiway abeam control tower.
Rhinelander (Rhinelander-Oneida Co)	109.2/RHI	G	212	0.5	At intersection of E–W taxiway at terminal.
Sheboygan Falls (Sheboygan Co Meml)	110.0/FAH	G	232	.4	On taxiway at Rwy 03 apch end.
Stevens Point (Stevens Point Muni)	110.6/STE	A/2500	257	12.1	Over N/S railroad and E/W road in Rudolph.
	110.6/STE	G	022	0.6	From AER 21.
Wausau (Central Wisconsin)	111.6/AUW	A/2800	222	5.5	Over intersection of N-S and E-W rwys.
West Bend	109.8/BJB	A/2500	220	7.6	Over microwave tower E of Slinger.

# **VOR TEST FACILITIES (VOT)**

Facility Name		Type VOT	
(Airport Name)	Freq.	Facility	Remarks
Milwaukee (Gen Mitchell Intl)	109.0	G	

The following tabulation lists all reported parachute jumping sites in the area of coverage of this directory. Unless otherwise indicated, all activities are conducted during daylight hours and under VFR conditions. The busiest periods of activity are normally on weekends and holidays, but jumps can be expected at anytime during the week at the locations listed. Jumps within restricted airspace are not listed.

All times are local and altitudes MSL unless otherwise specified.

Contact facility and frequency is listed at the end of the remarks, when available, in bold face type.

Refer to Federal Aviation Regulations Part 105 for required procedures relating to parachute jumping.

Organizations desiring listing of their jumping activities in this publication should contact the nearest FSS, tower or ARTCC.

Qualified parachute jumping sites will be depicted on the appropriate visual chart(s).

Note: (c) in this publication indicates that the parachute jump area is charted.

- To qualify for charting, a jump area must meet the following criteria:
  - (1) Been in operation for at least 1 year.
  - (2) Operate year round (at least on weekends).
  - (3) Log 4,000 or more jumps each year.

In addition, jump sites can be nominated by FAA Regions if special circumstances require charting.

LOCATION	DISTANCE AND RADIAL FROM NEAREST VOR/VORTAC	MAXIMUM ALTITUDE	REMARKS
	ILLINOIS		
(c) Carmi Muni	19.7 NM; 298°Pocket City	9,500 AGL	3 NM radius. SR-SS weekends.
Deer Grove		12,500	3 NM radius. SR-SS Year round.
Greenville Arpt		13,500	3 NM radius. Weekends and holidays, SR-1 hour after SS. Kansas City Center 127.7
(c) Hinckley Arpt	22 NM; 308°Joliet	14,500 AGL	2 NM radius. Mon-Fri 0800 to 1 hour after SS, Sat-Sun 0700 to 1 hour after SS.
(c) Minier, Illinois Valley Parachute Club			
	25 NM; 122°Peoria	15,000	Daily SR to 1 hour after SS.
(c) Ottawa, Skydive Chicago Arpt	23.1 NM; 250° Joliet	17,500 AGL	2 NM radius. SR to 1 hour past SS.
(c) Rantoul National Aviation Center–Frank Elliott Fld	16.5 NM; 019° Champaign	13,500	2 NM radius. Daily 0600-2200.
Sterling	16 NM; 206° Polo	12,000 AGL	Year round SR-SS. 10 NM radius.
Tampico		12,500	1 NM radius. 1000-SS daily.
(c) Taylorville, Taylorville Muni		15,000	5 NM radius. SR-1 hr past SS.
(c) Vandalia, Vandalia Muni	6.2 NM; 178° Vandalia	15,000	5 NM radius. Fri, Sat, Sun and holidays, SR-½ hour past SS.  Kansas City Center 124.3
	INDIANA		
(c) Angola, Tri–State Steuben Co Arpt		14,500	5 NM radius, Mon, Wed, Fri, Sat, Sun 0900-SS.
Cloverdale, Swope Airstrip	25 NM: 085° Terre Haute	12,500	5 NM radius. SR-SS daily.
(c) Connersville		13,500	5 NM radius. Daily SR-SS.
Crawfordsville, Crawfordsville Muni		15,000	3 NM radius. Fri-Sat-Sun SR-SS.
(c) Flora, Flora Muni		13,000	5 NM radius. Weekends and holidays, 0900–SS daily.
			Grissom APP CON 121.05
Franklin Flying Fld		13,500	5 NM radius. SR-SS daily.
(c) Goshen Muni		14,500 AGL	1 NM radius. Weds, Fri-Sat-Sun SR-SS. <b>South Bend Rgnl Tower</b> 132.05
(c) Greensburg Muni		12,000 AGL	2 NM radius. 0900-2000 daily.
Hobart Sky Ranch Arpt		10,000 AGL	2 NM radius. Weds, weekends 0800-SS.
Kingsbury		1,500	0.3 NM radius. Occasional use.
Mentone		12,500	3 NM radius. SR-SS daily.
Muncie, Horizon Fld		13,000	Daily 0600-1900.
(c) Richmond, Richmond Muni		14,500	3 NM radius. SR-1 hour after SS-daily.
Veedersburg, Songer Arpt	24 NM; 220°Boiler	10,000	5 NM radius. Weekends and holidays, SR-SS.
	MICHIGAN		
(c) Allegan, Padgham Fld	13 NM; 072° Pullman	10,700	2 NM radius. Daily SR-SS.
East Tawas, Iosco Co Arpt		15,000	5 NM radius. May-Oct SR-SS daily.
Fowlerville		12,000	5 NM radius. Apr-Oct 0800-SS.
Fremont Muni	_	12,000	3 NM radius. Apr-Oct Sat-Sun SR-SS.
Harbor Springs	17 NM; 235° Pellston	12,000	3 NM radius. May-Sep daily SR-SS.

LOCATION Marshall, Brooks Fld	DISTANCE AND RADIAL FROM NEAREST VOR/VORTAC 14 NM; 107° Battle Creek	MAXIMUM ALTITUDE 15,000	<b>REMARKS</b> 5 NM radius. Apr–Oct daily
(c) Mount Pleasant Muni Arpt	Ø NM; Mount Pleasant	14,000	0900-SS. 2 NM radius. Jan-Dec daily 0900-SS.
(c) Romeo	26 NM: 095° Pontice	15,000	2 NM radius. Apr–Oct daily SR–SS.
(c) Saginaw, Saginaw Co H.W. Browne	11 NM; 125° Saginaw	12,000	2 NM radius. Apr–Nov daily SR–SS.
(c) Tecumseh, Meyers-Diver's	22 NM; 272°Carleton	17,000	5 NM radius. Apr-Oct daily SR-SS.
Alliance, Barber Arpt	<b>OHIO</b> 9 NM; 155° Akron	13,500	5 NM radius. Mon, Wed, Thur, Fri and weekends SR-SS.
Alliance, Miller Arpt Bellville		13,500 AGL	5 NM radius. Daily SR-SS. 5 NM radius. SR-SS weekend.
(c) Bowling Green, Bordner Arpt		8,500 14,000	Daily. Radius 2 NM.
(c) Celina, Lakefield Arpt		14,000	1 NM radius. Daily SR–SS.
Centerburg, Chapman Mem	12 NM: 325°Appleton	12,000	SR-SS weekends.
(c) Chesapeake, Lawrence Co Airpark		11,000	1 NM radius. 0900–2300 Sat–Sun. 1600–2300 Wed–Fri. Tri–State/Milton J. Ferguson Field Tower 119.75
(c) Circleville, Clark Dream Strip	13 NM; 332° Yellow Bud	17,500	2 NM radius. Wed 0600-Sun 2400. Port Columbus Intl Tower 125.95
Commercial Point	32 NM; 233°Appleton	10,000	0800-2100 Sat, Sun.
Findlay	9 NM; 355°Findlay	12,500 AGL	Daily.
Fulton County Arpt	24.5; 295° Waterville	10,500	Daily SR-SS.
(c) Garrettsville, Gates Arpt		13,500 AGL	SR-SS daily.
Grafton, Mole Arpt		12,500	0700-0930 daily.
Lebanon, Lebanon-Warren Co Arpt		14,500 AGL	5 NM radius. Daily SR-SS.
Mansfield	4 NM; 132° Mansfield	3,000	3 NM radius. Tue-Fri 0800-2200. Unit training assemblies 1 weekend a month.
Ottawa, Putnam County Arpt	10.9 NM: 298°Findlay	10,500 AGL	SR-2400.
(c) Petersburg		12,500 AGL	2 NM radius, Mon-Fri 1700-SS, weekends SR-SS.
(c) Rittman, Hilty Fld	21 NM; 314° Briggs	16,000 AGL	5 NM radius. Daily 1 hour before SR-1 hour after SS.
Salem, Phillis Lakefront Arpt		10,000	Evening and weekends to SS
Stonelick Parachute Center		10,000	SR-SS daily.
Sycamore		12,500 AGL	1 NM radius. Daily SR-SS.
Van Wert County	-	10,000	Weekdays 1600-SS, Weekends SR-SS
Vickery, Wrights Fld		10,000 AGL	SR-SS weekends.
(c) Xenia, Skydive Green County Inc	32 NM; 129°DaytonWISCONSIN	12,500 AGL	Daily SR-2400.
(c) Baldwin Arpt		15,000 AGL	Wed-Fri 1500-½ hour past SS, Weekends SR-½ hour past SS.
(c) Bristol, Winfield Arpt		12,500 AGL	SR-½ hour past SS.
(c) Chippewa Falls, Wissota Arpt		15,000	5 NM radius. Daily SR-1 hour past SS.
(c) East Troy Muni Arpt		14,500 AGL	SR-1/2 hour past SS.
Edgerton, Jana Arpt		11,000	10 NM radius. Wed-Sun & Holidays SR-SS.
(c) Fort Atkinson Muni		14,000	3 NM radius. Daily SR-SS.
Lake Delton		12,500	Daily May 15-Sept 25.
(c) Lancaster Muni Arpt	22.8 NM; 359°Dubuque	13,500 AGL	2 NM radius. Sat-Sun 0900-1 hr past SS. Wed and Fri 1500-1 hr past SS.
(c) Marshall, Mathaire Fld		12,500 AGL	SR-1/2 hour past SS.
(c) Oshkosh		13,500 AGL	Daily SR-SS.
(c) Pulaski, Carter Arpt		12,000 AGL	Daily SR-SS.
(c) Shiocton		13,500	5 NM SR–SS daily.
(c) Superior, Richard I Bong	8 NM; 143°Duluth	12,500 AGL	3 NM radius. Daily SR-1 hour past SS.

The purpose of this bulletin is to provide major changes in aeronautical information that have occurred since the last publication date of each Sectional Aeronautical, VFR Terminal Area, and Helicopter Route Charts listed. The general policy is to include only those changes to controlled airspace and special use airspace that present a hazardous condition or impose a restriction on the pilot, and major changes to airports and radio navigational facilities, thereby providing the VFR pilot with the essential data necessary to update and maintain chart currency. The data is grouped by type and then by effective date. When a new edition of the Aeronautical Chart is published, the corrective tabulation will be removed from this bulletin. Inasmuch as this Bulletin provides major changes only, pilots should consult the airport listing in this directory for all new information. Users of U.S. World Aeronautical Charts (WAC) and U.S. Gulf Coast VFR Aeronautical Charts should consult the appropriate Sectional and VFR Terminal Area Charts for revisions.

Military Training Routes (MTRs) are shown on Sectional Aeronautical Charts, VFR Terminal Area, and Helicopter Route Charts. Only the route centerline, direction of flight and the route designator are shown —route widths and altitudes are not shown. Since these routes are subject to change every 56 days and the charts are reissued generally every 6 months, routes with a change in the alignment of the charted route centerline will be listed in this Aeronautical Chart Bulletin below. You are advised to contact the nearest FSS for route dimensions and current status for those routes affecting your flight.

# CG-21 WORLD AERONAUTICAL CHART 39th Edition, 24 Sep 2009

#### **OBSTRUCTIONS**

**22 Oct 2009** Add obst 1348'MSL (600'AGL), 34°15'06"N, 84°59'12"W. Change obst from 312'MSL to 1312'MSL, 33°35'33"N, 083°58'31"W. **17 Dec 2009** No Major Changes.

#### AIRPORTS

22 Oct 2009 Change elevation from 191' to 1911' at Blairsville arpt, 34°51'16"N, 083°59'50"W. Change runway orientation to 01/19 at Halifax-Northhampton Co Rgnl arpt, 36°19'47"N, 077°38'07"W. 17 Dec 2009 No Major Changes.

#### NAVAIDS

22 Oct 2009 - 17 Dec 2009 No Major Changes.

#### AIRSPACE

22 Oct 2009 - 17 Dec 2009 No Major Changes.

#### SPECIAL USE AIRSPACE

22 Oct 2009 - 17 Dec 2009 No Major Changes.

## **MILITARY TRAINING ROUTES**

22 Oct 2009 - 17 Dec 2009 No Major Changes.

#### **MISCELLANEOUS**

22 Oct 2009 - 17 Dec 2009 No Major Changes.

# CHICAGO HELICOPTER ROUTE CHART 5th Edition, 12 May 2005

## **OBSTRUCTIONS** 12 May 2005 - 7 Jul 2005 No Major Changes. 1 Sep 2005 Add obst 896' MSL (300' AGL) UC, 41°46'40"N, 87°49'16"W. 27 Oct 2005 - 5 Jul 2007 No Major Changes. 30 Aug 2007 Change group obst from 1780'MSL (1195'AGL) to 1973'MSL (1375'AGL)UC, 41°53'20"N. 87°37<sup>7</sup>36"W 25 Oct 2007 Change obst from 1130'MSL (335'AGL) to 1195'MSL (400'AGL), 41°36'01"N, 87°58'44"W. 20 Dec 2007 - 31 Jul 2008 No Major Changes. 25 Sep 2008 Add obst 968'MSL (370'AGL)UC, 41°34'40"N, 87°31'33"W. 20 Nov 2008 - 17 Dec 2009 No Major Changes. **AIRPORTS** 12 May 2005 - 7 Jul 2005 No Major Changes. 1 Sep 2005 Delete MILL ROSE arpt, 42°04'38"N, 88°09'35"W. 27 Oct 2005 Delete DARIEN-WOODRIDGE FIRE DEPT heliport, 41° 45'15"N, 88°00'26"W. 22 Dec 2005 - 5 Jul 2007 No Major Changes. 30 Aug 2007 Change CTAF freq 123.05 to 122.9 at SCHAUMBURG MUNI HELISTOP heliport. 42°02′53″N, 88°03′09″W. Delete ADDISON FIRE DEPARTMENT STATION 3 heliport, 41°55'48"N, 88°02'28"W. 25 Oct 2007 - 10 Apr 2008 No Major Changes. 5 Jun 2008 Delete LANDIS PLASTICS heli. 41°40'43"N. 87°45'45"W. Delete CRYSTAL LAKE HOLIDAY INN heli, 42°13'14"N, 88°17'05"W. Delete CLARK heli, 42°22′06″N, 87°59′30″W. **31 Jul 2008 – 20 Nov 2008** No Major Changes. 15 Jan 2009 Change CHICAGO O'HARE ATCT frequencies from 120.75(S), 126.9(N), 127.925 132.7 390.9 to 120.75 126.9 (CNTR TWR), 132.7 390.9 (CNTR TWR), 135.925 (N TWR), 41°58'51"N, 87°54'23"W. 12 Mar 2009 No Major Changes. 7 May 2009 Delete SEARS MERCHANDISE GROUP heli. 42°04'35"N. 088°13'01"W. Change CHICAGO O'HARE ATCT freq from 135.925(N TWR) to 128.15(N TWR), 41°58'51"N, 87°54'23"W. 2 Jul 2009 - 17 Dec 2009 No Major Changes. 12 May 2005 - 17 Dec 2009 No Major Changes. AIRSPACE 12 May 2005 - 25 Sep 2008 No Major Changes. 20 Nov 2008 Change CHICAGO Class B freq from 128.45 to 133.625. 12 Mar 2009 - 17 Dec 2009 No Major Changes.

#### **SPECIAL USE AIRSPACE**

12 May 2005 - 17 Dec 2009 No Major Changes.

#### MILITARY TRAINING ROUTES

12 May 2005 - 17 Dec 2009 No Major Changes.

#### MISCELLANEOUS

12 May 2005 - 17 Dec 2009 No Major Changes.

# CHICAGO SECTIONAL 79th Edition. 22 Oct 2009

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OBSTRUCTIONS
22 Oct 2009 No Major Changes
17 Dec 2009 Add obst 1055'MSL(268'AGL)UC, 40°39'52"N, 90°44'58"W.
Add obst 1047'MSL(240'AGL)UC, 40°02'51"N, 86°49'03"W.
Add obst 1270'MSL (600'AGL)UC, 41°38'06"N, 87°02'59"W.
Add obst 955'MSL(255'AGL)UC, 41°19'16"N, 87°12'38"W.
Add obst 875'MSL(215'AGL)UC, 41°30'57"N, 87°59'55"W.
Add obst 1087'MSL(260'AGL)UC, 43°58'08"N, 89°14'37"W.
Add obst 901'MSL (268'AGL)UC, 40°48'02"N, 90°10'30"W.
Add obst 984'MSL(250'AGL)UC, 41°01'59"N, 89°13'51"W.
Add obst 773'MSL(260'AGL)UC, 40°48'28"N, 89°34'47"W.
Add obst 1078'MSL(300'AGL)UC, 41°18'40"N, 90°10'40"W.
Add obst 1017'MSL(260'AGL)UC, 40°53'36"N, 89°02'03"W.
Add obst 998'MSL(258'AGL)UC, 40°13'17"N, 88°57'55"W.
Add obst 1200'MSL(450'AGL)UC, 40°37'48"N, 88°46'53"W.
Add obst 795'MSL(298'AGL)UC, 40°13'44"N, 90°45'34"W.
Add obst 974'MSL(228'AGL)UC, 40°52'58"N, 89°07'42"W.
Add obst 1428'MSL(280'AGL)UC, 44°15'56"N, 89°25'00"W. Add obst 1295'MSL(299'AGL)UC, 40°17'18"N, 85°00'34"W.
Add obst 1054'MSL(310'AGL)UC, 40°12'26"N, 87°05'29"W.
Add obst 1119'MSL(260'AGL)UC, 40°56'34"N, 85°39'55"W.
Add obst 1220'MSL(330'AGL)UC, 41°15'05"N, 85°38'22"W. Add obst 1017'MSL(325'AGL)UC, 41°15'57"N, 86°44'10"W.
Add obst 945'MSL(250'AGL)ÚC, 41°04'17"N, 86°46'20"W,
Add obst 1105'MSL(260'AGL)UC, 40°39'20"N, 85°09'16"W. Add obst 1509'MSL(349'AGL)UC, 44°03'59"N, 92°01'14"W.
Add obst 1680'MSL(350'AGL)UC, 43°39'34"N, 92°17'59"W.
Add obst 1650'MSL(350'AGL)UC, 43°34'13"N, 91°36'42"W.
Add obst 1599'MSL (349'AGL)UC, 43°55'34"N, 91°26'10"W.
Add obst 1526'MSL(350'AGL)UC, 43°40'08"N, 91°24'15"W. Add obst 1508'MSL(350'AGL)UC, 43°33'02"N, 91°21'41"W.
Add obst 1559'MSL(349'AGL)UC, 44°06'11"N, 91°51'18"W.
Add obst 1598'MSL(350'AGL)UC, 43°52'58"N, 92°00'11"W. Add obst 1570'MSL(350'AGL)UC, 43°48'39"N, 91°38'41"W. Add windrill 5 " (4.60'W) 15 " (4.
```

Add windmill farm. 1142'UC is highest MSL, 40°38'31"N, 86°58'09"W. Add windmill farm. 1111'UC is highest MSL, 41°06'41'81"N, 88°39'20"W. Add windmill farm. 1230'UC is highest MSL, 40°41'52"N, 88°39'10"W. Add windmill farm. 1163'UC is highest MSL, 40°56'36"N, 88°24'22"W.

#### **AIRPORTS**

22 Oct 2009 No Major Change.

**17 Dec 2009** Add CTAF 122.9 at FLYING FEATHERS arpt, 44°03′40″N, 88°11′42″W.

Delete KUNTZ arpt, 40°43′23″N, 88°52′00″W.

Delete MURKS arpt, 40°44'20"N, 90°22'50"W.

#### NAVAID

22 Oct 2009 No Major Changes.

17 Dec 2009 Shutdown KETTLE MORAINE NDB, 43°25'30"N, 88°07'38"W.

#### AIRSPACE

22 Oct 2009 No Major Changes.

**17 Dec 2009** Revise PEORIA, IL Class E: That airspace extending upward from 700 feet above the surface bounded by a line beginning at 40°54′00″N, 89°59′00″W; to 40°53′31″N, 89°41′35″W; to 40°54′41″N, 89°35′28″W; to 40°52′16″N, 89°29′22″W; to 40°46′40″N, 89°27′38″W; to 40°44′01″N, 89°29′35″W; to 40°22′00″N, 89°32′00″W; to lat.40°26′00″N, 90°07′00″W; to 40°34′00″N, 90°12′00″W; to 40°44′00″N, 90°08′00″W; to the point of beginning.

Revise WINONÁ, MN Class E. That airspace extending upward from 700 feet above the surface within a 7-mile radius of Winona Municipal Airport–Max Conrad Field, and within 8 miles southwest and 4 miles northeast of the 121° bearing from the airport extending from the 7-mile radius to 21 miles southeast of the airport, excluding that airspace within the La Crosse, WI Class D airspace area.

Revise PLATTEVILLE, WI Class E: That airspace extending upward from 700 feet above the surface within a 7.4-mile radius of Platteville Municipal Airport and within 4 miles each side of the 145° bearing from the airport extending from the 7.4-mile radius to 10.2 miles southeast of the airport.

#### **SPECIAL USE AIRSPACE**

22 Oct 2009 - 17 Dec 2009 No Major Changes.

# MILITARY TRAINING ROUTES

22 Oct 2009 - 17 Dec 2009 No Major Changes.

#### **MISCELLANEOUS**

22 Oct 2009 - 17 Dec 2009 No Major Changes.

# CHICAGO TERMINAL AREA CHART 79th Edition, 22 Oct 2009

**OBSTRUCTIONS** 

22 Oct 2009 - 17 Dec 2009 No Major Changes.

AIRPORTS

22 Oct 2009 - 17 Dec 2009 No Major Changes.

NAVAIDs

22 Oct 2009 - 17 Dec 2009 No Major Changes.

AIRSPACE

22 Oct 2009 - 17 Dec 2009 No Major Changes.

SPECIAL USE AIRSPACE

22 Oct 2009 - 17 Dec 2009 No Major Changes.

**MILITARY TRAINING ROUTES** 

22 Oct 2009 - 17 Dec 2009 No Major Changes.

**MISCELLANEOUS** 

22 Oct 2009 - 17 Dec 2009 No Major Changes.

## CINCINNATI SECTIONAL 83rd Edition, 17 Dec 2009

**OBSTRUCTIONS** 

17 Dec 2009 No Major Changes.

**AIRPORTS** 

17 Dec 2009 No Major Changes.

**NAVAIDs** 

17 Dec 2009 No Major Changes.

**AIRSPACE** 

17 Dec 2009 No Major Changes.

SPECIAL USE AIRSPACE

17 Dec 2009 No Major Changes.

MILITARY TRAINING ROUTES

17 Dec 2009 No Major Changes.

**MISCELLANEOUS** 

17 Dec 2009 No Major Changes.

# CINCINNATI TERMINAL AREA CHART 22nd Edition, 17 Dec 2009

**OBSTRUCTIONS** 

17 Dec 2009 No Major Changes.

**AIRPORTS** 

17 Dec 2009 No Major Changes.

NAVAIDs

17 Dec 2009 No Major Changes.

**AIRSPACE** 

17 Dec 2009 No Major Changes.

**SPECIAL USE AIRSPACE** 

17 Dec 2009 No Major Changes.

**MILITARY TRAINING ROUTES** 

17 Dec 2009 No Major Changes.

**MISCELLANEOUS** 

17 Dec 2009 No Major Changes.

# CLEVELAND TERMINAL AREA CHART 72nd Edition, 24 Sep 2009

**OBSTRUCTIONS** 

22 Oct 2009 - 17 Dec 2009 No Major Changes.

**AIRPORTS** 

22 Oct 2009 Delete SHENANDOAH AIRPARK arpt, 40°55′12″N, 82°28′44″W. 17 Dec 2009 No Major Changes.

**NAVAIDs** 

22 Oct 2009 - 17 Dec 2009 No Major Changes.

**AIRSPACE** 

22 Oct 2009 - 17 Dec 2009 No Major Changes.

**SPECIAL USE AIRSPACE** 

22 Oct 2009 - 17 Dec 2009 No Major Changes.

**MILITARY TRAINING ROUTES** 

22 Oct 2009 - 17 Dec 2009 No Major Changes.

**MISCELLANEOUS** 

22 Oct 2009 - 17 Dec 2009 No Major Changes.

# DETROIT HELICOPTER ROUTE CHART 1st Edition, 4 Aug 2005

# OBSTRUCTIONS 1 Sep 2005 No Major Changes. **27 Oct 2005** Add group obst 1009'MSL (388'AGL) UC, 42°03'58"N, 83° 23'40"W. **22 Dec 2005 – 12 Mar 2009** No Major Changes. 7 May 2009 Add obst 1293'MSL (330'AGL), 42°09'30"N, 84°01'31"W. 2 Jul 2009 - 17 Dec 2009 No Major Changes. **AIRPORTS** 1 Sep 2005 Add SELFRIDGE ANGB ATCT 340.7, 42°36′46″N, 82°49′54″W. 27 Oct 2005 Delete HYNES arpt, 42°36'39"N, 83°43'58"W. 22 Dec 2005 - 8 Jun 2006 No Major Changes 3 Aug 2006 Delete CTAF freq. 122.9 at SALINE arpt., 42°08′47″N, 83°47′31″W. 28 Sep 2006 – 10 May 2007 No Major Changes. 5 Jul 2007 Delete CARRIAGE LANE arpt, 42°27'52"N, 84°02'05"W. 30 Aug 2007 - 14 Feb 2008 No Major Changes. 10 Apr 2008 Delete FULLER heliport, 42°33'34"N, 83°10'40"W. **5 Jun 2008 – 31 Jul 2008** No Major Changes. **25 Sep 2008** Add SELFRIDGE ANGB ATCT freq 225.4, 42°36′30″N, 82°50′07″W. 20 Nov 2008 - 7 May 2009 No Major Changes. 2 Jul 2009 Delete INDEPENDENCE GREEN heliport, 42°28'12"N, 83°25'09"W. Delete COBO HALL heliport, 42°19'33"N, 83°02'52"W. 27 Aug 2009 - 17 Dec 2009 No Major Changes. **NAVAIDs** 1 Sep 2005 – 13 Apr 2006 No Major Changes. 8 Jun 2006 Delete LAUREL NDB, 42°14'38"N, 83°02'51"W. 3 Aug 2006 - 17 Dec 2009 No Major Changes. **AIRSPACE** 1 Sep 2005 - 15 Mar 2007 No Major Changes. 10 May 2007 Change DETROIT Class B freq from 124.9 to 127.5. 5 Jul 2007 - 17 Dec 2009 No Major Changes. SPECIAL USE AIRSPACE 1 Sep 2005 - 17 Dec 2009 No Major Changes. MILITARY TRAINING ROUTES

1 Sep 2005 - 17 Dec 2009 No Major Changes.

#### MISCELLANEOUS

1 Sep 2005 – 16 Feb 2006 No Major Changes. 13 Apr 2006 Change MEF  $1^1$  to  $1^2$  in quadrant  $42^{\circ}00' - 42^{\circ}15'$ N,  $83^{\circ}15' - 83^{\circ}30'$  W.

8 Jun 2006 - 17 Dec 2009 No Major Changes.

# **DETROIT SECTIONAL** 79th Edition, 24 Sep 2009

#### OBSTRUCTIONS

**22 Oct 2009** Add obst 1193'MSL (285'AGL)UC, 41°32'32"N, 80°51'34"W. Add obst 2540'MSL (260'AGL)UC, 41°53'03"N, 78°37'09"W. Add obst 956'MSL (203'AGL), 42°41'02"N, 78°54'26"W. Add obst 702'MSL (204'AGL), 42°57'23"N, 76°59'42"W. Add obst 3226'MSL (400'AGL)UC, 40°01'35"N, 78°48'07"W. Add obst 1001'MSL (394'AGL), 42°16'06"N, 82°16'30"W. 17 Dec 2009 Add obst 1394'MSL (297'AGL)UC, 40°00'24"N, 83°47'26"W. Add obst 1158'MSL (375'AGL)UC, 40°52'25"N, 84°29'02"W. Add obst 996'MSL (394'AGL), 42°16'58"N, 81°59'30"W. Add obst 900'MSL (255'AGL)UC, 43°46'10"N, 84°09'18"W. Add obst 1613'MSL(225'AGL)UC, 42°09'02"N, 78°45'46"W. Add obst 1529'MSL(260'AGL)UC, 42°42'18"N, 78°28'36"W. Add obst 1429'MSL(260'AGL)UC, 42°39'36"N, 78°26'06"W. Add obst 981'MSL (394'AGL), 42°28'11"N, 82°20'58"W. Add obst 1745'MSL(254'AGL)UC, 41°34'42"N, 79°24'55"W. Add obst 2925'MSL(410'AGL)UC, 40°18'05"N, 78°41'30"W.

#### AIRPORTS

22 Oct 2009 Delete ZEITLER arpt. 43°29'24"N. 84°21'54"W. Delete PEWANOGOWINK-BANKS arpt. 43°11′10″N. 83°54′04″W. Delete SHENANDOAH AIRPARK arpt, 40°55′12″N, 82°28′44″W. Delete MAYES arpt, 43°14'27"N, 84°52'48"W. 17 Dec 2009 Delete WINDSOR ATCT freq 236.6. 42°16'32"N. 82°57'20"W. Delete LONDON ATCT freq 236.6, 43°01'59"N, 81°09'04"W.

22 Oct 2009 - 17 Dec 2009 No Major Changes.

22 Oct 2009 Revise MANSFIELD, OH class E airspace. That airspace extending upward from 700 feet above the surface within a 6.9-mile radius of Mansfield Lahm Regional Airport and within a 6.3-mile radius of Galion Municipal Airport, and within a 6.3-mile radius of Shelby Community Airport, and within a 6.3-mile radius of Willard Airport, and within 4 miles each side of the 137° bearing from Mansfield Lahm Regional Airport extending from the 6.9-mile radius to 11.1 miles southeast of the airport, and within 4 miles each side of the 317° bearing from Mansfield Lahm Regional Airport extending from the 6.9-mile radius to 10.7 miles northwest of the airport, and within 6.1 miles each side of the Mansfield VORTAC 307° radial extending from the 6.9-mile radius to 13.3 miles northwest of the VORTAC, and within 4.4 miles each side of the Mansfield VORTAC 130° radial extending from the 6.9- mile radius to 13.8 miles southeast of the VORTAC

17 Dec 2009 Add SOUTHERN ONTARIO LOW LEVEL CONTROL AREA. The airspace above 2500' to 6500' within the area bounded by a line beginning at: 43°28'13"N, 82°11'02"W Canada/USA boundary to 44°41'37"N, 78°49'42"W to 45°20'55"N, 78°06'29"W to 45°43'31"N, 77°57'20"W to 45°50'35"N, 77°52′01″W to 46°06′45″N, 77°25′45″W to 46°08′00″N, 77°15′00″W to 45°57′40″N, 76°55′40″W to 45°50'15"N, 76°16'00"W to 44°13'17"N, 76°11'30"W thence west along the Canada/USA boundary to 44°03′29″N, 76°28′00″W Canada/USA boundary to 44°07′28″N, 76°43′06″W thence counter clockwise along the arc of a circle of 35 miles radius centered on 44°07′08″N, 77°31′41″W to 44°27′11″N, 76°51′46″W to 44°17′04″N, 77°36′46″W to 44°02′24″N, 78°19′46″W thence counter clockwise along the arc of a circle of 35 miles radius centered on 44°07′08″N. 77°31′41″W to 43°38′05″N. 77°58′39″W thence west along the Canada/USA boundary to 43°28'13"N, 82°11'02"W Canada/USA boundary to point

The airspace above 3500' within the area bounded by a line beginning at 43°28'13"N,82°11'02"W thence north west along the Canada/USA boundary to 46°50'03"N,84°50'20"W thence clockwise along the arc of a circle of 25 miles radius centered on 46°29'06"N,84°30'34"W to 46°54'02"N, 84°33'00"W to 47°12'42"N, 80°50'02"W thence clockwise along the arc of a circle of 35 miles radius centered on 46°37'45"N,80°47'54"W to 47°11'29"N, 80°34'23"W to 46°55'24"N, 79°11'54"W thence clockwise along the arc of a circle of 35 miles radius centered on 46°21′50″N,79°26′11″W to 46°30′12″N, 78°37′04″W to 46°26′41″N, 77°15′00″W to 46°08′00″N,77°15′00″W to 46°06′45″N, 77°25′45″W to 45°50′35″N,77°52′01″W to 45°43′31″N,77°57′20″W to 45°20′55″N, 78°06′29″W to 44°41′37″N, 78°49′42″W to 44°38′16″N,78°59′27″W thence counter clockwise along the arc of a circle of 65 miles radius centered on 43°39'29"N, 79°37'54"W to 43°53'03"N, 81°05'36"W to 43°28'13"N,82°11'02"W Canada/USA boundary to point of beginning.

#### SPECIAL USE AIRSPACE

22 Oct 2009 - 17 Dec 2009 No Major Changes.

#### MILITARY TRAINING ROUTES

22 Oct 2009 - 17 Dec 2009 No Major Changes.

#### MISCELLANEOUS

22 Oct 2009 No Major Changes.

17 Dec 2009 Delete RP\* at GROVE CITY arpt, 41°08'45"N, 80°10'03"W.

# DETROIT TERMINAL AREA CHART 72nd Edition, 24 Sep 2009

#### **OBSTRUCTIONS**

22 Oct 2009 - 17 Dec 2009 No Major Changes.

#### AIRPORTS

22 Oct 2009 No Major Changes.

17 Dec 2009 Delete WINDSOR ATCT freg 236.6, 42°16'32"N, 82°57'20"W.

#### NAVAID:

22 Oct 2009 - 17 Dec 2009 No Major Changes.

#### AIRSPACE

22 Oct 2009 No Major Changes.

17 Dec 2009 Add SOUTHERN ONTARIO LOW LEVEL CONTROL AREA. The airspace above 2500' to 6500' within the area bounded by a line beginning at 43°28'13"N, 82°11'02"W Canada/USA boundary to 44°41'37"N, 78°49'42"W to 45°20'55"N, 78°06'29"W to 45°43'31"N, 77°57'20"W to 45°50'35"N, 77°52'01"W to 46°06'45"N, 77°25'45"W to 46°08'00"N, 77°15'00"W to 45°57'40"N, 76°55'40"W to 45°50'15"N, 76°16'00"W to 44°13'17"N, 76°11'30"W thence west along the Canada/USA boundary to 44°07'28"N, 76°28'00'W Canada/USA boundary to 44°07'08"N, 76°43'06"W thence counter clockwise along the arc of a circle of 35 miles radius centered on 44°07'08"N, 77°31'41"W to 44°27'11"N, 76°51'46"W to 44°17'04"N, 77°36'46"W to 44°07'08"N, 77°31'41"W to 49°38'05"N, 77°58'39"W thence west along the Canada/USA boundary to 43°28'13"N, 82°11'02"W Canada/USA boundary to point of beginning.

### SPECIAL USE AIRSPACE

22 Oct 2009 - 17 Dec 2009 No Major Changes.

#### **MILITARY TRAINING ROUTES**

22 Oct 2009 - 17 Dec 2009 No Major Changes.

#### MISCELLANEOUS

22 Oct 2009 - 17 Dec 2009 No Major Changes.

# GREEN BAY SECTIONAL 79th Edition, 17 Dec 2009

#### **OBSTRUCTIONS**

17 Dec 2009 No Major Changes.

#### **AIRPORTS**

17 Dec 2009 No Major Changes.

# NAVAIDs

17 Dec 2009 No Major Changes.

#### **AIRSPACE**

17 Dec 2009 No Major Changes.

## SPECIAL USE AIRSPACE

17 Dec 2009 No Major Changes.

### MILITARY TRAINING ROUTES

17 Dec 2009 No Major Changes.

#### **MISCELLANEOUS**

17 Dec 2009 No Major Changes.

# KANSAS CITY SECTIONAL 83rd Edition, 19 Nov 2009

### **OBSTRUCTIONS**

17 Dec 2009 Add obst 1174'MSL (305'AGL)UC, 36°05'01"N, 96°35'42"W. Change to group obst 1178'MSL (335'AGL)UC, 37°01'30"N, 94°45'08"W. Add obst 1460'MSL (280'AGL), 36°32'20"N, 93°34'31"W. Add obst 1624'MSL (339'AGL)UC, 36°02'15"N, 93°55'05"W. Add obst 1591'MSL (315'AGL)UC, 36°53'31"N, 93°34'44"W. Add obst 1230'MSL (320'AGL)UC, 40°11'57"N, 95°02'00"W.

#### **AIRPORTS**

17 Dec 2009 Delete TERAMIRANDA arpt, 36°36′30″N, 94°52′21″W.

#### NAVAIDs

17 Dec 2009 No Major Changes.

#### **AIRSPACE**

including 3.600 feet MSL within a 4.9-mile radius of Forbes Field Airport and within 2.2 miles each side of the RIPLY LOM 317° bearing extending from the 4.9-mile radius to 5.3 miles northwest of the airport and within 1.8 miles each side of the Forbes Field Airport ILS Localizer southeast course extending from the 4.9-mile radius to 0.9 miles southeast of the RIPLY LOM. This Class D airspace area is effective during the specific dates and times established in advance by a Notice to Airmen. The effective dates and times will thereafter be continuously published in the Airport/Facility Directory. Revise TOPEKA, KS Class E: That airspace within a 4.9-mile radius of Forbes Field Airport, and within 2.2 miles each side of the RIPLY LOM 317° bearing extending from the 4.9-mile radius to 5.3 miles northwest of the airport and within 1.8 miles each side of the Forbes Field Airport ILS Localizer southeast course extending from the 4.9-mile radius to 0.9 miles southeast of the RIPLY LOM. That airspace extending upward from 700 feet above the surface within a 7.4-mile radius of Forbes Field Airport, and within 3.1 miles each side of the Forbes Field Airport ILS localizer course extending from the 7.4-mile radius to 13 miles southeast of the airport, and within 3.5 miles each side of the Forbes Field Airport ILS localizer course extending from the 7.4-mile radius to 13 miles northwest of the airport. Revise ST. LOUIS, MO Class E: That airspace extending upward from 700 feet above the surface within a 7.1-mile radius of Lambert-St. Louis International Airport, and within 4 miles southeast and 7 miles northwest of the Lambert- St. Louis International Airport Runway 24 ILS localizer course extending from the airport to 10.5 miles northeast of the ZUMAY LOM, and within 4 miles southwest and 7.9 miles northeast of the Lambert- St. Louis International Airport Runway 12R ILS localizer course extending from the airport to 10.5 miles northwest of the OBLIO LOM, and within 4 miles southwest and 7.9 miles northeast of the Lambert- St. Louis International Airport Runway 30L ILS localizer course extending from the airport to 8.7 miles southeast of the airport, and within a 6.8-mile radius of Spirit of St. Louis Airport, and within 3.9 miles each side of the 258° bearing from Spirit of St. Louis Airport extending from the 6.8-mile radius of Spirit of St. Louis Airport to 10.6 miles west of the airport, and within 2.6 miles each side of the 098° radial of the Foristell VORTAC extending from the 6.8-mile radius of Spirit of St. Louis Airport to 8.3 miles west of the airport, and within a 6.4-mile radius of St. Charles County Smartt Airport,

and within a 6.9-mile radius of St. Louis Regional Airport, and within 4 miles each side of the  $014^{\circ}$  bearing from the Civic Memorial NDB extending from the 6.9-mile radius of St. Louis Regional Airport to 7 miles north of the airport, and within 4.4 miles each side of the  $190^{\circ}$  radial of the St. Louis VORTAC

extending from 2 miles south of the VORTAC to 22.1 miles south of the VORTAC.

17 Dec 2009 Revise TOPEKA, KS Class D: That airspace extending upward from the surface to and

#### SPECIAL USE AIRSPACE

17 Dec 2009 No Major Changes.

# **MILITARY TRAINING ROUTES**

17 Dec 2009 No Major Changes.

#### **MISCELLANEOUS**

17 Dec 2009 No Major Changes.

# LAKE HURON SECTIONAL 78th Edition, 24 Sep 2009

#### **OBSTRUCTIONS**

22 Oct 2009 No Major Changes.

**17 Dec 2009** Add obst 881 MSL (255'AGL)UC, 45°31'39"N, 84°08'31"W. Add obst 1009'MSL (230'AGL), 46°33'26"N, 84°19'23"W.

#### **AIRPORTS**

22 Oct 2009 No Major Changes.

17 Dec 2009 Deleté NEW LÖWELL arpt, 44°23'15"N, 79°56'36"W. Delete SAULT STE MARIE ATCT 236.6, 46°29'06"N, 84°30'34"W. Wawa, ON VOR.

#### **NAVAIDs**

22 Oct 2009 - 17 Dec 2009 No Major Changes.

#### AIRSPACE

22 Oct 2009 No Major Changes.

miles radius centered on the following: 47°55′102″N, 84°49′23″W. Add SOUTHERN ONTARIO LOW LEVEL CONTROL AREA. The airspace above 2500′ to 6500′ within the area bounded by a line beginning at: 43°28′13″N, 82°11′02″W Canada/USA boundary to 44°41′37″N, 78°49′42″W to 45°20′55″N, 78°06′29″W to 45°43′31″N, 77°57′20″W to 45°50′35″N, 77°52′01″W to 46°06′45″N, 77°25′45″W to 46°08′00″N, 77°15′00″W to 45°57′40″N, 76°55′40″W to 45°50′15″N, 76°16′00″W to 44°13′17″N, 76°11′30″W thence west along the Canada/USA boundary to 44°03′29″N, 76°28′00″W Canada/USA boundary to 44°07′28″N, 76°43′06″W thence counter-clockwise along the arc of a circle of 35 miles radius centered on 44°07′08″N, 77°31′41″W to 44°27′11″N, 76°51′46″W to 44°17′04″N, 77°36′46″W to 44°07′28″N, 77°31′41″W to 44°27′11″N, 76°51′46″W to 44°17′04″N, 77°36′46″W to 44°07′08″N, 77°31′41″W to 43°38′05″N, 77°58′39″W thence west along the Canada/USA boundary to 43°28′13″N, 82°11′02″W Canada/USA boundary to point of beginning. The airspace above 6500′ within the area bounded by a line beginning at 43°28′13″N, 82°11′02″W Canada/USA boundary to 42°34′30″N, 79°36′29″W thence west along the Canada/USA boundary to 43°28′13″N, 82°11′02″W Canada/USA boundary to point of beginning. The airspace above 6500′ within the area bounded by a line beginning at 42°34′30″N, 79°36′29″W thence west along the Canada/USA boundary to 43°28′13″N, 82°11′02″W Canada/USA boundary to 43°38′13″N, 82°11′02″W Canada/USA boundary to 43°38′13″N, 82°11′02″W Canada/USA boundary to 43°38′13″N, 82°11′02″N, 79°37′54″W to 44°04′07″N, 79°36′29″W, 79°37′54″W to 44°04′07″N, 78°14′48″W to 44°02′2′25″N, 78°19′46″W thence counter-clockwise along the arc of a circle of 65 miles centered on 43°39′29″N,

17 Dec 2009 Add CONTROL AREA EXTENSION. The airspace within the area bounded by a circle of 25

thence west along the Canada/ USA boundary to  $42^\circ 34' 30''^\circ 36' 29''$  Canada/USA boundary to point of beginning. The airspace above 6,500' within the area bounded by a line beginning at:  $44^\circ 38' 17'' N$ ,  $78^\circ 59' 27'' W$  to  $44^\circ 41' 37'' N$ ,  $78^\circ 49' 42'' W$  to  $45^\circ 20' 55'' N$ ,  $78^\circ 06' 29'' W$  to  $45^\circ 43' 31'' N$ ,  $77^\circ 57' 20'' W$  to  $45^\circ 50' 35'' N$ ,  $77^\circ 52' 20'' W$  to  $46^\circ 06' 45'' N$ ,  $77^\circ 25' 45'' W$  to  $46^\circ 08' 00'' N$ ,  $77^\circ 15' 00'' W$  to  $45^\circ 57' 40'' N$ ,  $76^\circ 55' 40'' W$  to  $45^\circ 50' 15'' N$ ,  $76^\circ 16' 00' W$  to  $44^\circ 13' 17'' N$ ,  $76^\circ 11' 30'' W$  thence west along the Canada/USA boundary to  $44^\circ 03' 29'' N$ ,  $76^\circ 28' 00'' W$  Canada/USA boundary to  $44^\circ 07' 28'' N$ ,  $76^\circ 43' 06'' W$  thence counter-clockwise along the arc of a circle of 35 miles radius centered on  $44^\circ 07' 08'' N$ ,  $77^\circ 31' 41'' W$  to  $44^\circ 27' 11'' N$ ,

76°51'46"W to 44°17'04"N, 77°36'46"W to 44°04'07"N, 78°14'47"W thence counter-clockwise along the

the arc of a circle of 35 miles radius centered on 44°07′08″N, 77°31′41″W to 43°38′05″N, 77°58′39 W

arc of a circle of 65 miles radius centered on 43°39'29"N, 79°37'54"W to 44°38'16"N, 78°59'27"W to

The airspace above 17000′ within the area bounded by a line beginning at: 43°38′05″N, 77°58′39″W Canada/USA boundary thence clockwise along the arc of a circle of 35 miles radius centered on 44°07′08″N, 77°31′41″W to 44°02′24″N, 78°19′46″W to 44°17′04″N, 77°36′46″W to 44°27′11″N, 76°51′46″W thence clockwise along the arc of a circle of 35 miles radius centered on 44°07′08″N, 77°31′41″W to 44°07′28″N, 76°43′06″W to 44°03′29″N, 76°28′00″W thence west along the Canada/USA boundary to 43°38′05″N, 77°58′39″W Canada/USA boundary to point of beginning. The airspace above 3500′ within the area bounded by a line beginning at 43°28′13″N, 82°11′02″W thence north west along the Canada/USA boundary to 46°50′03″N, 84°50′20″W thence clockwise along the arc of a circle of 25 miles radius centered on 46°29′06″N, 84°30′34″W to 46°54′02″N, 84°33′00″W to 47°12′42″N, 80°50′02″W thence clockwise along the arc of a circle of 35 miles radius centered on 46°37′45″N, 80°47′54″W to 47°11′29″N, 80°34′23″W to 46°55′24″N, 79°11′54″W thence clockwise along the arc of a circle of 35 miles radius centered on 46°37′45″N, 80°47′54″W to 47°11′29″N, 80°34′23″W to 46°56′24″N, 79°11′54″W thence clockwise along the arc of a circle of 35 miles radius centered on 46°37′45″N, 70°41″N to 45°31′42″N, 77°15′00″W to 46°55′57″N, 78°49′42″W to 46°30′12″N, 78°37′04″W to 46°66′41″N, 77°51′500″W to 46°06′45″N, 77°25′45″W to 45°50′35″N, 78°06′29″W to 44°41′37″N, 78°49′42″W to 44°38′16″N, 78°59′27″W thence counter-clockwise along the arc of a circle of 65 miles radius centered on 43°39′29″N, 79°37′54″W to 43°53′03″N, 81°05′36″W to 43°28′13″N, 82°11′02″W Canada/USA boundary to point of beginning

Canada/USA boundary to point of beginning. The airspace above 3500' to 6500' within the area bounded by a line beginning at 43°53'03"N, 81°05'37"W thence clockwise along the arc of a circle of 65 miles radius centered on 43°39'29"N, 79°37'54"W to 44°38'16"N, 78°59'28"W to 43°53'03"N, 81°05'37"W to point of beginning.

CONTINUED ON NEXT PAGE

#### CONTINUED FROM PRECEDING PAGE

SPECIAL USE AIRSPACE 22 Oct 2009 - 17 Dec 2009 No Major Changes.

MILITARY TRAINING ROUTES

22 Oct 2009 - 17 Dec 2009 No Major Changes.

**MISCELLANEOUS** 

22 Oct 2009 - 17 Dec 2009 No Major Changes.

# MINNEAPOLIS-ST. PAUL TERMINAL AREA CHART 72nd Edition, 2 Jul 2009

**OBSTRUCTIONS** 

2 Jul 2009 - 17 Dec 2009 No Major Changes.

AIRPORTS

2 Jul 2009 - 17 Dec 2009 No Major Changes.

NAVAIDs

2 Jul 2009 - 17 Dec 2009 No Major Changes.

**AIRSPACI** 

2 Jul 2009 - 27 Aug 2009 No Major Changes.

**22 Oct 2009** Revise MINNEAPOLIS, MN. Class E. That airspace extending upward from 700 feet above the surface within a 20-mile radius of the Minneapolis-St. Paul International Airport (Wold-Chamberlain) Airport DME antenna, and within a 6.5-mile radius of the Anoka County-Blaine Airport (Janes Field), and within 4 miles each side of the 001° bearing from the Anoka County-Blaine Airport (Janes Field) extending from the 6.5-mile radius to 9.9 miles north of the airport, and within a 6.3-mile radius of the Lake Elmo Airport, and within a 6.4-mile radius of the Airlake Airport, and within 3.3 miles each side of the 084° bearing from the Farmington VORTAC extending from the 6.4-mile radius to 14.8 miles east of the Airlake Airport.

17 Dec 2009 No Major Changes.

SPECIAL USE AIRSPACE

2 Jul 2009 - 17 Dec 2009 No Major Changes.

MILITARY TRAINING ROUTES

2 Jul 2009 - 17 Dec 2009 No Major Changes.

**MISCELLANEOUS** 

2 Jul 2009 - 17 Dec 2009 No Major Changes.

# PITTSBURGH TERMINAL AREA CHART 72nd Edition, 24 Sep 2009

## **OBSTRUCTIONS**

22 Oct 2009 No Major Changes.

17 Dec 2009 Add obst 1154' MSL (328'AGL)UC, 40°28'38"N, 79°53'01"W.

22 Oct 2009 - 17 Dec 2009 No Major Changes.

#### **NAVAIDs**

22 Oct 2009 - 17 Dec 2009 No Major Changes.

AIRSPACE 22 Oct 2009 – 17 Dec 2009 No Major Changes.

# SPECIAL USE AIRSPACE

22 Oct 2009 - 17 Dec 2009 No Major Changes.

#### MILITARY TRAINING ROUTES

22 Oct 2009 - 17 Dec 2009 No Major Changes.

#### **MISCELLANEOUS**

22 Oct 2009 - 17 Dec 2009 No Major Changes.

# ST. LOUIS SECTIONAL 81st Edition, 17 Dec 2009

#### **OBSTRUCTIONS**

17 Dec 2009 No Major Changes.

#### **AIRPORTS**

17 Dec 2009 No Major Changes.

## **NAVAIDs**

17 Dec 2009 No Major Changes.

#### **AIRSPACE**

17 Dec 2009 No Major Changes.

## SPECIAL USE AIRSPACE

17 Dec 2009 No Major Changes.

#### MILITARY TRAINING ROUTES

17 Dec 2009 No Major Changes.

#### **MISCELLANEOUS**

17 Dec 2009 No Major Changes.

# ST. LOUIS TERMINAL AREA CHART 73rd Edition, 17 Dec 2009

#### OBSTRUCTIONS

17 Dec 2009 No Major Changes.

#### **AIRPORTS**

17 Dec 2009 No Major Changes.

17 Dec 2009 No Major Changes.

#### **AIRSPACE**

17 Dec 2009 No Major Changes.

#### SPECIAL USE AIRSPACE

17 Dec 2009 No Major Changes.

#### MILITARY TRAINING ROUTES

17 Dec 2009 No Major Changes.

#### MISCELLANEOUS

17 Dec 2009 No Major Changes.

# TWIN CITIES SECTIONAL 78th Edition, 2 Jul 2009

#### OBSTRUCTIONS

2 Jul 2009 No Major Changes.

27 Aug 2009 Add windmill farm. 2608' is highest MSL, 45°57'36"N, 98°58'15"W.

22 Oct 2009 Add obst 1580'MSL (305'AGL)UC, 45°20'57"N, 95°15'14"W.

Add obst 1981'MSL (295'AGL)UC, 46°23'06"N, 100°37'17"W. Add obst 2414'MSL (340'AGL)UC, 48°52'37"N, 100°03'24"W. Add obst 2514'MSL (340'AGL)UC, 48°56'57"N, 100°03'14"W.

Add obst 2361'MSL (260'AGL)UC, 47°34'40"N, 100°36'13"W.

Add obst 2237'MSL (260'AGL)UC, 47°24'38"N, 100°35'22"W. Add obst 2238'MSL (260'AGL)UC, 47°32'29"N, 100°14'40"W.

Add obst 2334'MSL (310'AGL)UC, 47°23'02"N, 100°16'57"W. Add windmill farm. 2118' is highest MSL, 48°30'23"N, 99°54'54"W

17 Dec 2009 Add obst 1565'MSL (305'AGL)UC, 47°44'50"N, 95°46'57"W.

Add obst 1665'MSL (305'AGL)UC,  $47^{\circ}49'41''N$ ,  $93^{\circ}09'55''W$ . Add obst 1450'MSL (305'AGL)UC,  $48^{\circ}24'44''N$ ,  $96^{\circ}10'04''W$ .

Add obst 1763'MSL (469'AGL)UC, 46°53'17"N, 92°30'38"W.

Add obst 1765'MSL (350'AGL)UC, 47°39'05"N, 92°51'55"W. Add obst 1504'MSL (350'AGL)UC, 45°32'56"N, 96°19'27"W.

2 Jul 2009 - 22 Oct 2009 No Major Changes.

17 Dec 2009 Delete PRUETZ arpt, 46°17′19″N, 98°56′31″W.

Change CTAF 126.05 to 132.4 at ANOKA COUNTY-BLAINE arpt 45°08'41"N, 93°12'36"W.

#### **NAVAIDs**

2 Jul 2009 - 17 Dec 2009 No Major Changes.

2 Jul 2009 - 27 Aug 2009 No Major Changes.

22 Oct 2009 Revise MINNEAPOLIŚ, MN. Class E. That airspace extending upward from 700 feet above the surface within a 20-mile radius of the Minneapolis-St. Paul International Airport (Wold-Chamberlain) Airport DME antenna, and within a 6.5-mile radius of the Anoka County-Blaine Airport (Janes Field), and within 4 miles each side of the 001° bearing from the Anoka County-Blaine Airport (Janes Field) extending from the 6.5-mile radius to 9.9 miles north of the airport, and within a 6.3-mile radius of the Lake Elmo Airport, and within a 6.4-mile radius of the Airlake Airport, and within 3.3 miles each side of the 084° bearing from the Farmington VORTAC extending from the 6.4-mile radius to 14.8 miles east of the Airlake Airport

17 Dec 2009 No Major Changes.

#### SPECIAL USE AIRSPACE

2 Jul 2009 - 17 Dec 2009 No Major Changes.

#### MILITARY TRAINING ROUTES

2 Jul 2009 - 17 Dec 2009 No Major Changes.

## MISCELLANEOUS

**2** Jul 2009 – 17 Dec 2009 No Major Changes. 17 Dec 2009 Change MEF  $2^5$  to  $2^7$  in quadrant  $45^\circ30'00''N$ ,  $99^\circ00'00''W$ . Change MEF  $2^7$  to  $2^8$  in quadrant  $45^\circ30'00''N$ ,  $98^\circ30'00''W$ . Change MEF  $2^2$  to  $2^3$  in quadrant  $48^\circ00'00''N$ ,  $99^\circ30'00''W$ .

## SUPPLEMENTAL COMMUNICATION REFERENCE

Contained within this tabulation, and listed alphabetically by airport name, are all private—use airports charted on the U.S. IFR Enroute Low and High Altitude charts in the United States, having terminal approach and departure control facilities. Additionally, listed by country, are all Canadian and Mexican airports that appear on the U.S. IFR Enroute charts with approach and departure control services. All frequencies transmit and receive unless otherwise noted. Radials defining sectors are outbound from the facility.

	STAT	

FACILITY NAME	CHART & PANEL
Frankfort, IL (LL4Ø)	L-28H
Chicago App/Dep Con 133.1 285.6	
Glasgow Industrial, MT (Ø7MT)	H-1E, 2F, L-13D
Salt Lake Center App/Dep Con 126.85 305.2	
USAF Academy Bullseye Aux Airstrip, CO (CO9Ø)	L-10F
ASOS 118.325	
West Kentucky Airpark, KY (5KY3)	L-16I
Memphis Center App/Dep Con 133.65 292.15	
William P Gwinn, FL (Ø6FA)	H-8I, L-23C
Gwinn Tower 120.4 279.25 (Mon-Fri 1300-2100Z‡)	
Gnd Con 121.65 279.25	

AC	CANADA CANADA	CHART & PANE
	Abbotsford, BC (CYXX)	H-1B, L-12
-	ATIS 119.8 (1500–0700Z‡)	11 15, 2 12
	Victoria Trml App/Dep Con 132.7 (Avbl on ground) 290.8	
	Tower 119.4 (Inner) 121.0 (Outer) 295.0 (1500–0700Z‡) Gnd Con 121.8	
	MF 119.4 295.0 (0700–1500Z‡) (Shape irregular to 4500')	
A	Amos/Magny, QC (CYEY)	H-11I
-	Montreal Center App/Dep Con 125.9	
Α	Atikokan Muni, ON (CYIB)	L-14
-	MF 122.3 (5 NM to 4500' No ground station)	
В	Barrie-Orillia (Lake Simcoe Rgnl), ON (CYLS)	H-11B, L-31
_	AWOS 122.55 (Pvt)	,
	Toronto Center App/Dep Con 124.025	
В	Bar River, ON (CPF2)	L-310
	Toronto Center App/Dep Con 132.65	
В	Bathurst, NB (CZBF)	L-32
	Moncton Center App/Dep Con 134.25	
В	Boundary Bay, BC (CZBB)	H-1B. L-1
	ATIS 125.5 (1500-0700Z‡)	•
	Vancouver App/Dep Con 132.3 363.8	
	Tower 118.1 (Inner) 127.6 (Outer) (1500-0700Z‡) Gnd Con 124.3	
	MF 118.1 (0700–1500Z‡ to 2000'. Vancouver Trml 125.2 above 2000'. Shape irreg	ular to 2500'.)
В	Brampton, ON (CNC3)	L-31I
	Toronto Trml App/Dep Con 119.3 253.1	
В	Brandon Muni, MB (CYBR)	H-2I
	Winnipeg Center App/Dep Con 132.25 285.4	
	MF 122.1 (5 NM to 4000')	
В	Brantford, ON (CYFD)	L-31
	Toronto Trml App/Dep Con 128.27	
В	Brockville-Thousand Islands Rgnl Tackaberry, ON (CNL3)	L-32
	Montreal Center App/Dep Con 134.675	
В	Bromont, QC (CZBM)	L-320
	Montreal Center App/Dep Con 132.35 MF 122.15 (5 NM to 3400')	
В	Burlington Airpark, ON (CZBA)	L-31I
	Toronto Center App/Dep Con 119.3 253.1	
C	Castlegar, BC (CYCG)	H-1
	Vancouver Center App/Dep Con 134.2 227.3	
	MF 122.1 (5 NM to 6500')	
C	Centralia/James T. Fld Muni, ON (CYCE)	H-10G, 11B, L-31I
	Toronto Center App/Dep Con 135.30	
C	Charlottetown, PE (CYYG)	H-11E, L-32
	Moncton Center App/Dep Con 135.65 384.8 MF 118.0 (5 NM to 3200')	
C	Chatham-Kent, ON (CNZ3)	H-10G, L-300
	Cleveland Center App/Dep Con 132.25	

I

COLLITY NAME  Collingwood, ON (CNY3)	CHART & PANE H-11B, L-31D
Toronto Center App/Dep Con 124.02	H-11B, L-31L
Cornwall Rgnl, ON (CYCC)	L-32G
Boston Center App/Dep Con 135.25 377.1	2 323
Cranbrook/Canadian Rockies Intl, BC (CYXC)	H-1C
Vancouver Center App/Dep Con 133.6 MF 122.3 (5 NM to 6100')	
lebert, NS (CCQ3)	H-11E, L-32J
Halifax Trml App/Dep Con 119.2	
ligby, NS (CYID)	L-32J
Moncton Center App/Dep Con 123.9	
Ownsview, ON (CYZD)	H-11B, L-31E
Toronto Center App Con 133.4	
Toronto Center Dep Con 133.4	
MF 126.2 (1300–2300Z‡, 3 NM to 1700′)  Drummondville, QC (CSC3)	L-32H
Montreal Center App/Dep Con 132.35	L=3211
arlton (Timiskaming Rgnl), ON (CYXR)	H-11B
MF 122.0 (5 NM to 3800')	11 110
AWOS 128.6	
illiot Lake Muni, ON (CYEL)	L-31C
Toronto Center App/Dep Con 135.4	
Fort Frances Muni, ON (CYAG)	L-14H
Minneapolis Center App/Dep Con 120.9	
redericton Intl, NB (CYFC)	H-11E, L-32I
ATIS 127.55	
Moncton Center App/Dep Con 124.3 135.5 270.8	
Tower 119.0 (1200–2000Z, DT 1100–1900Z) Gnd Con 121.7 (Ltd hrs)	
MF 119.0 (2000–1200Z, DT 1900–1100Z 5 NM to 3500')	
Goderich, ON (CYGD)	H-11B, L-31D
Toronto Center App/Dep 135.3 266.3	H 445 L 221
ireenwood, NS (CYZX) ATIS 128.85 244.3 (1100-0000Z‡)	H-11E, L-32J
App/Dep Con 120.6 335.9 Tower 119.5 126.2 236.6 324.3	
Gnd Con 133.75 289.4 Clnc Del 128.05 283.9	
Grimsby Air Park, ON (CNZ8)	L-31E
Toronto Trml App/Dep Con 128.27 268.75 Tower 125.0 308.475	
lalifax/Shearwater, NS (CYAW)	H-11E, L-32J
ATIS 129.175 (Ltd hrs)	
App/Dep Con 119.2 Tower 119.0 126.2 340.2 360.2 (Ltd hrs)	
Gnd Con 121.7 250.1	
lalifax/Stanfield Intl, NS (CYHZ)	H-11E, L-32J
ATIS 121.0	
Moncton Center App/Dep Con 118.7 119.2 128.55 135.3 225.2 363.8	
Tower 118.4 236.6 Gnd Con 121.9 275.8 Clnc Del 123.95	
Apron Advisory 122.125	II 40II 44B I 44B
lamilton, ON (CYHM)	H-10H, 11B, L-11B
ATIS 128.1 Toronto Trml App/Dep Con 128.27 268.75 Tower 119.7 125.0	
Gnd Con 121.6	
ingston, ON (CYGK)	H-11C, L-31E, 32F
Montreal Center App/Dep Con 135.05 398.4 (0400–1115Z‡)	11 110, 2 012, 021
MF 122.5 (1115–0400Z‡ 5 NM to 3300')	
(itchener/Waterloo, ON (CYKF)	H-11B, L-31D
ATIS 125.1 (1200-0400Z‡)	,
Toronto Trml App/Dep Con 128.275	
Waterloo Tower 126.0 118.55 (1200-0400Z‡) Gnd Con 121.8	
MF 126.0 (0400-1200Z‡ 5 NM to 4000')	
achute, QC (CSE4)	L-32G
Montreal Center App Con 124.65 132.85 268.3	
Montreal Center Dep Con 132.85 268.3	
a Tuque, QC (CYLQ)	H-11C
Montreal Center App/Dep Con 134.5	
angley, BC (CYNJ)	L-1E
ATIS 124.5 (1630–0230Z, DT 1530–0330Z)	
Victoria Trml 132.7 290.8 Tower 119.0 (1630–0230Z, DT 1530–0330Z)	
Gnd Con 121.9 MF 119.0 (0230–1630Z, DT 0330–1530Z 3 NM to 1900')	

Leamington, ON (CLM2)	CHART & PANE L-30
Cleveland Center App/Dep Con 132.45	
Lethbridge, AB (CYQL)	H-1I
ATIS 124.4 (1300-0545Z‡)	
Edmonton Center App/Dep Con 132.75 265.2 MF 121.0 (5 NM to 6000')	
Lindsay, ON (CNF4)	L-31E, L-32
Toronto Center App/Dep 134.25	
Liverpool/South Shore Rgnl, NS (CYAU)	L-32
Moncton Center App/Dep Con 123.9	
London, ON (CYXU)	H-10G, 11E
ATIS 127.8 (1120-0345Z‡)	L-30G, 31
Toronto Center App/Dep 135.3 135.625	
Tower 119.4 125.65 (1120-0345Z‡) Gnd Con 121.9	
MF 119.4 (0345–1120Z‡ 5 NM to 3000')	
Manitowaning/Manitoulin East Muni, ON (CYEM)	L-31
Toronto Center App/Dep 135.4 260.9	
Maniwaki, QC (CYMW)	L-32
Montreal Center App/Dep Con 126.57	
Mascouche, QC (CSK3)	L-32
MF 122.35 (5 NM to 2500'. No gnd station. Excluding the portion S of the	
N shore of Riviere des Milles-lles and 1 NM around Lac Agile Mascouche arpt.)	
Medicine Hat, AB (CYXH)	H-1
AWOS 124.875 (0345–1245Z‡)	
MF 122.2 (1245–0345Z‡ 5 NM to 5400')	
Midland/Huronia, ON (CYEE)	L-31
Toronto Center App/Dep 124.025	
Miramichi, NB (CYCH)	H-11E, L-32
Moncton Center App/Dep Con 123.7	
Moncton/Greater Moncton Intl, NB (CYQM)	H-11E, L-32
ATIS 128.65	
App/Dep 124.4 Tower 120.8 236.6 Gnd Con 121.8 275.8	
Apron Advisory 122.075	
Mont-Laurier, QC (CSD4)	L-320
Montreal Center App/Dep Con 126.57	
Montreal Intl (Mirabel), QC (CYMX)	H-11C, 12K, L-32
ATIS 125.7	
Montreal Center App Con 124.65 132.85 268.3	
Montreal Center App Con 124.65 132.85 268.3 Montreal Dep Con 132.85	
Montreal Dep Con 132.85 MF 119.1 (7 NM shape irregular to 2000') VFR Advisory 134.15	
Montreal Dep Con 132.85	H-11C, 12K, L-32
Montreal Dep Con 132.85 MF 119.1 (7 NM shape irregular to 2000') VFR Advisory 134.15	H-11C, 12K, L-32
Montreal Dep Con 132.85  MF 119.1 (7 NM shape irregular to 2000') VFR Advisory 134.15  Montreal/Pierre Elliott Trudeau Intl, QC (CYUL)  ATIS 133.7  Montreal Trml App Con 118.9 124.65 126.9 132.85 268.3	H-11C, 12K, L-32
Montreal Dep Con 132.85  MF 119.1 (7 NM shape irregular to 2000') VFR Advisory 134.15  Montreal/Pierre Elliott Trudeau Intl, QC (CYUL)  ATIS 133.7	H-11C, 12K, L-32
Montreal Dep Con 132.85  MF 119.1 (7 NM shape irregular to 2000') VFR Advisory 134.15  Montreal/Pierre Elliott Trudeau Intl, QC (CYUL)  ATIS 133.7  Montreal Trml App Con 118.9 124.65 126.9 132.85 268.3	H-11C, 12K, L-32
Montreal Dep Con 132.85  MF 119.1 (7 NM shape irregular to 2000') VFR Advisory 134.15  Montreal/Pierre Elliott Trudeau Intl, QC (CYUL)  ATIS 133.7  Montreal Trml App Con 118.9 124.65 126.9 132.85 268.3  Tower 119.9 267.1 Gnd Con 121.9 275.8 Clnc Del 125.6 Apron 122.075	H-11C, 12K, L-32
Montreal Dep Con 132.85  MF 119.1 (7 NM shape irregular to 2000') VFR Advisory 134.15  Montreal/Pierre Elliott Trudeau Intl, QC (CYUL)  ATIS 133.7  Montreal Trml App Con 118.9 124.65 126.9 132.85 268.3  Tower 119.9 267.1 Gnd Con 121.9 275.8 Clnc Del 125.6 Apron 122.075  Montreal Trml Dep Con 118.9 (SE-S-SW) 124.65 268.3 (W-NW-NE)	
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Montreal Dep Con 132.85  MF 119.1 (7 NM shape irregular to 2000') VFR Advisory 134.15  Montreal/Pierre Elliott Trudeau Intl, QC (CYUL)  ATIS 133.7  Montreal Trml App Con 118.9 124.65 126.9 132.85 268.3  Tower 119.9 267.1 Gnd Con 121.9 275.8 Clnc Del 125.6 Apron 122.075  Montreal Trml Dep Con 118.9 (SE-S-SW) 124.65 268.3 (W-NW-NE)  VFR Advisory 134.15  Montreal/St-Hubert, QC (CYHU)	
Montreal Dep Con 132.85  MF 119.1 (7 NM shape irregular to 2000') VFR Advisory 134.15  Montreal/Pierre Elliott Trudeau Intl, QC (CYUL)  ATIS 133.7  Montreal Trml App Con 118.9 124.65 126.9 132.85 268.3  Tower 119.9 267.1 Gnd Con 121.9 275.8 Clnc Del 125.6 Apron 122.075  Montreal Trml Dep Con 118.9 (SE-S-SW) 124.65 268.3 (W-NW-NE)  VFR Advisory 134.15  Montreal/St-Hubert, QC (CYHU)  ATIS 124.9 (Apr-Oct 1045-0500Z‡, Nov-Mar 1045-0400Z) AWOS 124.9	
Montreal Dep Con 132.85  MF 119.1 (7 NM shape irregular to 2000') VFR Advisory 134.15  Montreal/Pierre Elliott Trudeau Intl, QC (CYUL)  ATIS 133.7  Montreal Trml App Con 118.9 124.65 126.9 132.85 268.3  Tower 119.9 267.1 Gnd Con 121.9 275.8 Clnc Del 125.6 Apron 122.075  Montreal Trml Dep Con 118.9 (SE-S-SW) 124.65 268.3 (W-NW-NE)  VFR Advisory 134.15  Montreal/St-Hubert, QC (CYHU)  ATIS 124.9 (Apr-Oct 1045-0500Z‡, Nov-Mar 1045-0400Z) AWOS 124.9  Montreal Center App/Dep Con 125.15 268.3	
Montreal Dep Con 132.85  MF 119.1 (7 NM shape irregular to 2000') VFR Advisory 134.15  Montreal/Pierre Elliott Trudeau Intl, QC (CYUL)  ATIS 133.7  Montreal Trml App Con 118.9 124.65 126.9 132.85 268.3  Tower 119.9 267.1 Gnd Con 121.9 275.8 Clnc Del 125.6 Apron 122.075  Montreal Trml Dep Con 118.9 (SE-S-SW) 124.65 268.3 (W-NW-NE)  VFR Advisory 134.15  Montreal/St-Hubert, QC (CYHU)  ATIS 124.9 (Apr-Oct 1045-0500Z‡, Nov-Mar 1045-0400Z) AWOS 124.9  Montreal Center App/Dep Con 125.15 268.3  St. Hubert Tower 118.4 (Apr-Oct 1045-0500Z‡, Nov-Mar 1045-0400Z)	
Montreal Dep Con 132.85  MF 119.1 (7 NM shape irregular to 2000') VFR Advisory 134.15  Montreal/Pierre Elliott Trudeau Intl, QC (CYUL)  ATIS 133.7  Montreal Trml App Con 118.9 124.65 126.9 132.85 268.3  Tower 119.9 267.1 Gnd Con 121.9 275.8 Clnc Del 125.6 Apron 122.075  Montreal Trml Dep Con 118.9 (SE-S-SW) 124.65 268.3 (W-NW-NE)  VFR Advisory 134.15  Montreal/St-Hubert, QC (CYHU)  ATIS 124.9 (Apr-Oct 1045-0500Z‡, Nov-Mar 1045-0400Z) AWOS 124.9  Montreal Center App/Dep Con 125.15 268.3  St. Hubert Tower 118.4 (Apr-Oct 1045-0500Z‡, Nov-Mar 1045-0400Z)  Gnd Con 126.4 MF 118.4 (Apr-Oct 0500-1045Z‡, Nov-Mar	H-11C, L-32
Montreal Dep Con 132.85  MF 119.1 (7 NM shape irregular to 2000') VFR Advisory 134.15  Montreal/Pierre Elliott Trudeau Intl, QC (CYUL)  ATIS 133.7  Montreal Trml App Con 118.9 124.65 126.9 132.85 268.3  Tower 119.9 267.1 Gnd Con 121.9 275.8 Clnc Del 125.6 Apron 122.075  Montreal Trml Dep Con 118.9 (SE-S-SW) 124.65 268.3 (W-NW-NE)  VFR Advisory 134.15  Montreal/ST-Hubert, QC (CYHU)  ATIS 124.9 (Apr-Oct 1045-0500Z‡, Nov-Mar 1045-0400Z) AWOS 124.9  Montreal Center App/Dep Con 125.15 268.3  St. Hubert Tower 118.4 (Apr-Oct 1045-0500Z‡, Nov-Mar 1045-0400Z)  Gnd Con 126.4 MF 118.4 (Apr-Oct 0500-1045Z‡, Nov-Mar 0400-1045Z 5 NM shape irregular to 2500') VFR Advisory 134.15	H-11C, L-32
Montreal Dep Con 132.85  MF 119.1 (7 NM shape irregular to 2000') VFR Advisory 134.15  Montreal/Pierre Elliott Trudeau Intl, QC (CYUL)  ATIS 133.7  Montreal Trml App Con 118.9 124.65 126.9 132.85 268.3  Tower 119.9 267.1 Gnd Con 121.9 275.8 Clnc Del 125.6 Apron 122.075  Montreal Trml Dep Con 118.9 (SE-S-SW) 124.65 268.3 (W-NW-NE)  VFR Advisory 134.15  Montreal/St-Hubert, QC (CYHU)  ATIS 124.9 (Apr-Oct 1045-0500Z‡, Nov-Mar 1045-0400Z) AWOS 124.9  Montreal Center App/Dep Con 125.15 268.3  St. Hubert Tower 118.4 (Apr-Oct 1045-0500Z‡, Nov-Mar 1045-0400Z)  Gnd Con 126.4 MF 118.4 (Apr-Oct 0500-1045Z‡, Nov-Mar 0400-1045Z 5 NM shape irregular to 2500') VFR Advisory 134.15  Muskoka, QN (CYQA)	H-11C, L-32
Montreal Dep Con 132.85  MF 119.1 (7 NM shape irregular to 2000') VFR Advisory 134.15  Montreal/Pierre Elliott Trudeau Intl, QC (CYUL)  ATIS 133.7  Montreal Trml App Con 118.9 124.65 126.9 132.85 268.3  Tower 119.9 267.1 Gnd Con 121.9 275.8 Clnc Del 125.6 Apron 122.075  Montreal Trml Dep Con 118.9 (SE-S-SW) 124.65 268.3 (W-NW-NE)  VFR Advisory 134.15  Montreal/St-Hubert, QC (CYHU)  ATIS 124.9 (Apr-Oct 1045-0500Z‡, Nov-Mar 1045-0400Z) AWOS 124.9  Montreal Center App/Dep Con 125.15 268.3  St. Hubert Tower 118.4 (Apr-Oct 1045-0500Z‡, Nov-Mar 1045-0400Z)  Gnd Con 126.4 MF 118.4 (Apr-Oct 0500-1045Z‡, Nov-Mar 0400-1045Z 5 NM shape irregular to 2500') VFR Advisory 134.15  Muskoka, DN (CYQA)  AWOS 124.575	H-11C, L-32 H-11B, L-31
Montreal Dep Con 132.85  MF 119.1 (7 NM shape irregular to 2000') VFR Advisory 134.15  Montreal/Pierre Elliott Trudeau Intl, QC (CYUL)  ATIS 133.7  Montreal Trml App Con 118.9 124.65 126.9 132.85 268.3  Tower 119.9 267.1 Gnd Con 121.9 275.8 Clnc Del 125.6 Apron 122.075  Montreal Trml Dep Con 118.9 (SE-S-SW) 124.65 268.3 (W-NW-NE)  VFR Advisory 134.15  Montreal/St-Hubert, QC (CYHU)  ATIS 124.9 (Apr-Oct 1045-0500Z‡, Nov-Mar 1045-0400Z) AWOS 124.9  Montreal Center App/Dep Con 125.15 268.3  St. Hubert Tower 118.4 (Apr-Oct 1045-0500Z‡, Nov-Mar 1045-0400Z)  Gnd Con 126.4 MF 118.4 (Apr-Oct 0500-1045Z‡, Nov-Mar 0400-1045Z 5 NM shape irregular to 2500') VFR Advisory 134.15  Muskoka, QN (CYQA)  AWOS 124.575  MF 122.3 (5 NM to 3900')	H-11C, L-32 H-11B, L-31 H-1B, L-1
Montreal Dep Con 132.85  MF 119.1 (7 NM shape irregular to 2000') VFR Advisory 134.15  Montreal/Pierre Elliott Trudeau Intl, QC (CYUL)  ATIS 133.7  Montreal Trml App Con 118.9 124.65 126.9 132.85 268.3  Tower 119.9 267.1 Gnd Con 121.9 275.8 Clnc Del 125.6 Apron 122.075  Montreal Trml Dep Con 118.9 (SE-S-SW) 124.65 268.3 (W-NW-NE)  VFR Advisory 134.15  Montreal/St-Hubert, QC (CYHU)  ATIS 124.9 (Apr-Oct 1045-0500Z‡, Nov-Mar 1045-0400Z) AWOS 124.9  Montreal Center App/Dep Con 125.15 268.3  St. Hubert Tower 118.4 (Apr-Oct 1045-0500Z‡, Nov-Mar 1045-0400Z)  Gnd Con 126.4 MF 118.4 (Apr-Oct 0500-1045Z‡, Nov-Mar 0400-1045Z 5 NM shape irregular to 2500') VFR Advisory 134.15  Muskoka, QN (CYQA)  AWOS 124.575  MF 122.3 (5 NM to 3900')  Nanaimo, BC (CYCD)	H-11C, L-32 H-11B, L-31 H-1B, L-1
Montreal Dep Con 132.85 MF 119.1 (7 NM shape irregular to 2000') VFR Advisory 134.15 Montreal/Pierre Elliott Trudeau Intl, QC (CYUL) ATIS 133.7 Montreal Trml App Con 118.9 124.65 126.9 132.85 268.3 Tower 119.9 267.1 Gnd Con 121.9 275.8 Clnc Del 125.6 Apron 122.075 Montreal Trml Dep Con 118.9 (SE-S-SW) 124.65 268.3 (W-NW-NE) VFR Advisory 134.15 Montreal/St-Hubert, QC (CYHU) ATIS 124.9 (Apr-Oct 1045-0500Z‡, Nov-Mar 1045-0400Z) AWOS 124.9 Montreal Center App/Dep Con 125.15 268.3 St. Hubert Tower 118.4 (Apr-Oct 1045-0500Z‡, Nov-Mar 1045-0400Z) Gnd Con 126.4 MF 118.4 (Apr-Oct 0500-1045Z‡, Nov-Mar 0400-1045Z 5 NM shape irregular to 2500') VFR Advisory 134.15 Muskoka, QN (CYQA) AWOS 124.575 MF 122.3 (5 NM to 3900') Nanaimo, BC (CYCD) Victoria Trml App/Dep 120.8 133.95 252.3 MF 122.1 1330-0530Z‡ (5 NM to 2500')	H-11C, L-32 H-11B, L-31 H-1B, L-1
Montreal Dep Con 132.85 MF 119.1 (7 NM shape irregular to 2000') VFR Advisory 134.15 Montreal/Pierre Elliott Trudeau Intl, QC (CYUL) ATIS 133.7 Montreal Trml App Con 118.9 124.65 126.9 132.85 268.3 Tower 119.9 267.1 Gnd Con 121.9 275.8 Clnc Del 125.6 Apron 122.075 Montreal Trml Dep Con 118.9 (SE-S-SW) 124.65 268.3 (W-NW-NE) VFR Advisory 134.15 Montreal/St-Hubert, QC (CYHU) ATIS 124.9 (Apr-Oct 1045-0500Z‡, Nov-Mar 1045-0400Z) AWOS 124.9 Montreal Center App/Dep Con 125.15 268.3 St. Hubert Tower 118.4 (Apr-Oct 1045-0500Z‡, Nov-Mar 1045-0400Z) Gnd Con 126.4 MF 118.4 (Apr-Oct 0500-1045Z‡, Nov-Mar 0400-1045Z 5 NM shape irregular to 2500') VFR Advisory 134.15 Muskoka, QN (CYQA) AWOS 124.575 MF 122.3 (5 NM to 3900') Nanaimo, BC (CYCD) Victoria Trml App/Dep 120.8 133.95 252.3 MF 122.1 1330-0530Z‡ (5 NM to 2500') North Bay, QN (CYYB)	H-11C, L-32 H-11B, L-31 H-1B, L-1
Montreal Dep Con 132.85 MF 119.1 (7 NM shape irregular to 2000') VFR Advisory 134.15 Montreal/Pierre Elliott Trudeau Intt, QC (CYUL) ATIS 133.7 Montreal Trml App Con 118.9 124.65 126.9 132.85 268.3 Tower 119.9 267.1 Gnd Con 121.9 275.8 Clnc Del 125.6 Apron 122.075 Montreal Trml Dep Con 118.9 (SE-S-SW) 124.65 268.3 (W-NW-NE) VFR Advisory 134.15 Montreal/St-Hubert, QC (CYHU) ATIS 124.9 (Apr-Oct 1045-0500Z‡, Nov-Mar 1045-0400Z) AWOS 124.9 Montreal Center App/Dep Con 125.15 268.3 St. Hubert Tower 118.4 (Apr-Oct 1045-0500Z‡, Nov-Mar 1045-0400Z) Gnd Con 126.4 MF 118.4 (Apr-Oct 0500-1045Z‡, Nov-Mar 0400-1045Z 5 NM shape irregular to 2500') VFR Advisory 134.15 Muskoka, QN (CYQA) AWOS 124.575 MF 122.3 (5 NM to 3900') Nanaimo, BC (CYCD) Victoria Trml App/Dep 120.8 133.95 252.3 MF 122.1 1330-0530Z‡ (5 NM to 2500') North Bay, QN (CYYB) ATIS 124.9 (1130-0300Z‡)	H-11C, L-32 H-11B, L-31 H-1B, L-1
Montreal Dep Con 132.85 MF 119.1 (7 NM shape irregular to 2000') VFR Advisory 134.15 Montreal/Pierre Elliott Trudeau Intl, QC (CYUL) ATIS 133.7 Montreal Trml App Con 118.9 124.65 126.9 132.85 268.3 Tower 119.9 267.1 Gnd Con 121.9 275.8 Clnc Del 125.6 Apron 122.075 Montreal Trml Dep Con 118.9 (SE-S-SW) 124.65 268.3 (W-NW-NE) VFR Advisory 134.15 Montreal/St-Hubert, QC (CYHU) ATIS 124.9 (Apr-Oct 1045-0500Z‡, Nov-Mar 1045-0400Z) AWOS 124.9 Montreal Center App/Dep Con 125.15 268.3 St. Hubert Tower 118.4 (Apr-Oct 1045-0500Z‡, Nov-Mar 1045-0400Z) Gnd Con 126.4 MF 118.4 (Apr-Oct 0500-1045Z‡, Nov-Mar 0400-1045Z 5 NM shape irregular to 2500') VFR Advisory 134.15 Muskoka, QN (CYQA) AWOS 124.575 MF 122.3 (5 NM to 3900') Nanaimo, BC (CYCD) Victoria Trml App/Dep 120.8 133.95 252.3 MF 122.1 1330-0530Z‡ (5 NM to 2500') North Bay, QN (CYYB) ATIS 124.9 (1130-0300Z‡) Toronto Center App/Dep 121.225 127.25 MF 118.3 (1130-0330Z‡ 7 NM to 5000')	H-11C, L-32 H-11B, L-31 H-18, L-31
Montreal Dep Con 132.85 MF 119.1 (7 NM shape irregular to 2000') VFR Advisory 134.15 Montreal/Pierre Elliott Trudeau Intl, QC (CYUL) ATIS 133.7 Montreal Trml App Con 118.9 124.65 126.9 132.85 268.3 Tower 119.9 267.1 Gnd Con 121.9 275.8 Clnc Del 125.6 Apron 122.075 Montreal Trml Dep Con 118.9 (SE-S-SW) 124.65 268.3 (W-NW-NE) VFR Advisory 134.15 Montreal/St-Hubert, QC (CYHU) ATIS 124.9 (Apr-Oct 1045-0500Z‡, Nov-Mar 1045-0400Z) AWOS 124.9 Montreal Center App/Dep Con 125.15 268.3 St. Hubert Tower 118.4 (Apr-Oct 1045-0500Z‡, Nov-Mar 1045-0400Z) Gnd Con 126.4 MF 118.4 (Apr-Oct 0500-1045Z‡, Nov-Mar 0400-1045Z 5 NM shape irregular to 2500') VFR Advisory 134.15 Muskoka, QN (CYQA) AWOS 124.575 MF 122.3 (5 NM to 3900') Nanaimo, BC (CYCD) Victoria Trml App/Dep 120.8 133.95 252.3 MF 122.1 1330-0530Z‡ (5 NM to 2500') North Bay, QN (CYYB) ATIS 124.9 (1130-0300Z‡) Toronto Center App/Dep 121.225 127.25 MF 118.3 (1130-0330Z‡ 7 NM to 5000') Oshawa, QN (CYOO)	H-11C, L-32 H-11B, L-31 H-1B, L-1
Montreal Dep Con 132.85 MF 119.1 (7 NM shape irregular to 2000') VFR Advisory 134.15 Montreal/Pierre Elliott Trudeau Intl, QC (CYUL) ATIS 133.7 Montreal Trml App Con 118.9 124.65 126.9 132.85 268.3 Tower 119.9 267.1 Gnd Con 121.9 275.8 Clnc Del 125.6 Apron 122.075 Montreal Trml Dep Con 118.9 (SE-S-SW) 124.65 268.3 (W-NW-NE) VFR Advisory 134.15 Montreal/St-Hubert, QC (CYHU) ATIS 124.9 (Apr-Oct 1045-0500Z‡, Nov-Mar 1045-0400Z) AWOS 124.9 Montreal Center App/Dep Con 125.15 268.3 St. Hubert Tower 118.4 (Apr-Oct 1045-0500Z‡, Nov-Mar 1045-0400Z) Gnd Con 126.4 MF 118.4 (Apr-Oct 0500-1045Z‡, Nov-Mar 0400-1045Z 5 NM shape irregular to 2500') VFR Advisory 134.15 Muskoka, QN (CYQA) AWOS 124.575 MF 122.3 (5 NM to 3900') Nanaimo, BC (CYCD) Victoria Trml App/Dep 120.8 133.95 252.3 MF 122.1 1330-0530Z‡ (5 NM to 2500') North Bay, QN (CYYB) ATIS 124.9 (1130-0300Z‡) Toronto Center App/Dep 121.225 127.25 MF 118.3 (1130-0330Z‡ 7 NM to 5000') Oshawa, QN (CYOO) ATIS 125.675 (1130-0330Z‡)	H-11C, L-32 H-11B, L-31 H-1B, L-1
Montreal Dep Con 132.85 MF 119.1 (7 NM shape irregular to 2000') VFR Advisory 134.15 Montreal/Pierre Elliott Trudeau Intl, QC (CYUL) ATIS 133.7 Montreal Trml App Con 118.9 124.65 126.9 132.85 268.3 Tower 119.9 267.1 Gnd Con 121.9 275.8 Clnc Del 125.6 Apron 122.075 Montreal Trml Dep Con 118.9 (SE-S-SW) 124.65 268.3 (W-NW-NE) VFR Advisory 134.15 Montreal/St-Hubert, QC (CYHU) ATIS 124.9 (Apr-Oct 1045-0500Z‡, Nov-Mar 1045-0400Z) AWOS 124.9 Montreal Center App/Dep Con 125.15 268.3 St. Hubert Tower 118.4 (Apr-Oct 1045-0500Z‡, Nov-Mar 1045-0400Z) Gnd Con 126.4 MF 118.4 (Apr-Oct 0500-1045Z‡, Nov-Mar 0400-1045Z 5 NM shape irregular to 2500') VFR Advisory 134.15 Muskoka, QN (CYQA) AWOS 124.575 MF 122.3 (5 NM to 3900') Nanaimo, BC (CYCD) Victoria Trml App/Dep 120.8 133.95 252.3 MF 122.1 1330-0530Z‡ (5 NM to 2500') North Bay, QN (CYYB) ATIS 124.9 (1130-0300Z‡) Toronto Center App/Dep 121.225 127.25 MF 118.3 (1130-0330Z‡ 7 NM to 5000') Oshawa, QN (CYOO)	H-11C, 12K, L-32  H-11C, L-32  H-11B, L-31  H-1B, L-1  L-31

CILITY NAME	CHART & PANEL
Ottawa/Carp, ON (CYRP)	L-31E, 32F
ATIS 121.15	
Ottawa Trml App/Dep Con 128.175 252.5	H-11C, L-32G
Ottawa/Gatineau, QC (CYND) Ottawa Trml App/Dep Con 127.7 128.175 252.5	H-11C, L-32G
MF 122.3 (5 NM shape irregular to 2500')	
VFR Advisory Ottawa Trml 127.7	
Ottawa/MacDonald-Cartier Intl, ON (CYOW)	L-110
ATIS 121.15	L-110
Ottawa App Con 135.15 Tower 118.8 120.1 341.3	
Gnd Con 121.9 Clnc Del 119.4	
Ottawa Dep Con 128.175	
Owen Sound/Billy Bishop Rgnl, ON (CYOS)	L-31D
Toronto Center App/Dep 132.575 290.6	
Pelee Island, ON (CYPT)	L-30F
Cleveland Center App/Dep Con 126.35 360.0	
Pembroke, ON (CYTA)	H-11C, L-31E, 32F
Montreal Center App/Dep Con 135.2	
Petawawa Advisory 126.4 250.1 (Mon-Fri 1300-2130Z‡, OT PPR)	
Penticton, BC (CYYF)	H-1E
Vancouver Center App/Dep Con 133.5 351.3 MF 118.5 (5 NM to 4100')	
Peterborough, ON (CYPQ)	H-11B, L-31E, 32F
AWOS 126.925	
Toronto Center App/Dep 134.25	
Pincher Creek, AB (CZPC)	H-10
Edmonton Center App/Dep Con 132.75 265.2	
Pitt Meadows, BC (CYPK)	L-1E
ATIS 125.0 (1500-0700Z‡)	
Vancouver Center App Con 128.6 352.7 (Outer)	
Pitt Tower 126.3 (1500–0700Z‡) Gnd Con 123.8	
Vancouver Center Dep Con 132.3 363.8 (South)	
MF 126.3 (0700–1500Z‡) (3NM to 2500′)	
Quebec/Jean Lesage Intl, QC (CYQB)	H-11D, L-32H
ATIS 134.6	
Montreal Center App/Dep Con 124.0 127.85 135.025 270.9 322.8	
(185.65 Quebec Twr VFR acft at or below 3000') Tower 118.65 236.6	
Gnd Con 121.9 250.0	
Riviere Du Loup, QC (CYRI)	H-11C
AWOS 122.025 (Pvt)  Montreal Contar Ann (Don Con 125 1 200 6	
Montreal Center App/Dep Con 125.1 299.6  Rouyn Noranda, QC (CYUY)	H-11E
Montreal Center App/Dep Con 125.9	U-TIE
MF 122.2 (5 NM to 4000')	
Saint John, NB (CYSJ)	H-11E, L-32.
Moncton Center App/Dep Con 124.3 135.5 270.8 MF 118.5 (5 NM to 3400')	11 111, 2 02.
Sarnia (Chris Hadfield), ON (CYZR)	H-10G, 11B, L-30F
Toronto Center 134.375	11 100, 110, 2 001
Sault Ste Marie, ON (CYAM)	H-2K, L-31E
ATIS 133.05 (1300–0100Z‡)	11 211, 2 012
Toronto Center App/Dep Con 132.65 344.5	
Tower 118.8 (1300–0100Z‡) Gnd Con 121.7	
MF 118.8 (0100–1300Z‡ 5 NM irregular shape to 3000')	
Sherbrooke, QC (CYAM)	H-11D, L-32h
AWOS 126.25	,
Montreal Center App/Dep Con 132.55 MF 123.5 (Ltd hrs 5 NM to 3800')	
South Renfrew Muni, ON (CNP3)	L-31E, 32F
Montreal Center App/Dep 124.275	, 02.
	H-2H
SUULIIPUIL, MB (CTPG)	
Southport, MB (CYPG) ATIS 120.85 (Mon-Fri 1400–2300Z‡ except holidays)	
Solutiput, mb (4745) ATIS 120.85 (Mon-Fri 1400-2300Z‡ except holidays) Tower 126.2 384.2 (Mon-Fri 1400-2300Z‡ except holidays)	

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Springwater Barrie Airpark, ON (CNA3)	CHART & PANE L-310
Toronto Center App/Dep Con 124.025	L-311
St. Catherines/Niagara District, ON (CYSN)	H-10H, 11B, L-31E
ATIS 128.525 (1215–0200Z‡)	10.1, 110, 2 011
Toronto Trml App/Dep Con 133.4 253.1	
MF 123.25 (1215-0200Z‡ 5 NM to 3300')	
St Frederic, QC (CSZ4)	L-32F
Montreal Center App/Dep Con 135.025 270.9	
Ct. Georges, QC (CYSG)	H-32H, L-11D
Montreal Center App/Dep Con 132.35	
MF 122.15 (5 NM 3900' ASL)	
St. Jean, QC (CYJN)	L-320
Montreal Center App/Dep Con 125.15 268.3	
Tower 118.2 (Apr-Oct 1230-0230Z‡ Nov-Mar 1300-0200Z‡)	
Gnd Con 121.7	
Sudbury, ON (CYSB)	H-31B, 10G, L-31D
ATIS 127.4	
Toronto Center App/Dep Con 135.5	
MF 125.5 (7 NM to 4000')	
ummerside, PE (CYSU)	H-11E, L-32J
AWOS 122.55 (Pvt)	
Moncton Center App/Dep Con 124.4 384.8	
hunder Bay, ON (CYQT)	H–2J, L–14.
ATIS 128.8 (1100-0400Z‡)	
Winnipeg Center App/Dep Con 132.125 (0400-1100Z‡)	
Tower 118.1 (1100-0400Z‡) Gnd Con 121.9	
App/Dep 119.2 MF 118.1 (0400-1100Z‡ 5 NM to 4000')	
immins, ON (CYTS)	H-11E
ATIS 124.95 (1000-0500Z‡)	
Toronto Center App/Dep Con 128.3 226.3 MF 122.3 (5 NM to 4000')	
oronto/Buttonville Muni, ON (CYKZ)	L-31E
ATIS 127.1 (1200-0400Z‡)	
Toronto Center App Con 133.4 Toronto Center Dep Con 133.4	
Tower 124.8 119.9 (1200-0400Z‡) Gnd Con 121.8	
MF 124.8 (0400–1200Z‡ No gnd station. 5 NM shape irregular to below 2500')	
oronto/City Centre, ON (CYTZ)	L-31E
ATIS 133.6 (1130-0400Z‡)	
App Con 133.4 Dep Con 133.4	
Tower 118.2 119.2 (1130-0400Z‡) Gnd Con 121.7	
Foronto/Lester B Pearson Intl, ON (CYYZ)	H-11B, L-31D
ATIS 120.825	
ATIS 120.825	
ATIS 120.825 App Con 124.475 125.4 132.8 Dep Con 127.575 128.8	
ATIS 120.825 App Con 124.475 125.4 132.8 Dep Con 127.575 128.8 Tower 118.35 118.7 Gnd Con 118.0 119.1 121.65 121.9 Clnc Del 121.3 (1200–0400Z‡) VFR Advisory 119.3 133.4	H-11C, L-31E, 32F
ATIS 120.825  App Con 124.475 125.4 132.8 Dep Con 127.575 128.8  Tower 118.35 118.7 Gnd Con 118.0 119.1 121.65 121.9  Clnc Del 121.3 (1200–0400Z‡) VFR Advisory 119.3 133.4	H–11C, L–31E, 32F
ATIS 120.825 App Con 124.475 125.4 132.8 Dep Con 127.575 128.8 Tower 118.35 118.7 Gnd Con 118.0 119.1 121.65 121.9 Clnc Del 121.3 (1200–0400Z‡) VFR Advisory 119.3 133.4  Trenton, ON (CYTR)	H-11C, L-31E, 32F
ATIS 120.825 App Con 124.475 125.4 132.8 Dep Con 127.575 128.8 Tower 118.35 118.7 Gnd Con 118.0 119.1 121.65 121.9 Clnc Del 121.3 (1200–0400Z‡) VFR Advisory 119.3 133.4  [Tenton, 0N (CYTR) ATIS 135.45 257.7 App/Dep Con 128.4 324.3 Tower 128.7 236.6 Gnd Con 121.9 275.8	H-11C, L-31E, 32F
ATIS 120.825 App Con 124.475 125.4 132.8 Dep Con 127.575 128.8 Tower 118.35 118.7 Gnd Con 118.0 119.1 121.65 121.9 Clinc Del 121.3 (1200–0400Z‡) VFR Advisory 119.3 133.4  Trenton, ON (CYTR) ATIS 135.45 257.7 App/Dep Con 128.4 324.3 Tower 128.7 236.6 Gnd Con 121.9 275.8 Clinc Del 124.35 286.4	
ATIS 120.825  App Con 124.475 125.4 132.8 Dep Con 127.575 128.8  Tower 118.35 118.7 Gnd Con 118.0 119.1 121.65 121.9  Clinc Del 121.3 (1200–0400Z‡) VFR Advisory 119.3 133.4  Trenton, ON (CYTR)  ATIS 135.45 257.7  App/Dep Con 128.4 324.3 Tower 128.7 236.6 Gnd Con 121.9 275.8  Clinc Del 124.35 286.4	
ATIS 120.825 App Con 124.475 125.4 132.8 Dep Con 127.575 128.8 Tower 118.35 118.7 Gnd Con 118.0 119.1 121.65 121.9 Clnc Del 121.3 (1200–0400Z‡) VFR Advisory 119.3 133.4  Trenton, ON (CYTR) ATIS 135.45 257.7 App/Dep Con 128.4 324.3 Tower 128.7 236.6 Gnd Con 121.9 275.8 Clnc Del 124.35 286.4  Trenton/Mountain View, ON (CPZ3) Trenton Mil Advisory 268.0	H–11C, L–31E, 32F
ATIS 120.825 App Con 124.475 125.4 132.8 Dep Con 127.575 128.8 Tower 118.35 118.7 Gnd Con 118.0 119.1 121.65 121.9 Clnc Del 121.3 (1200–0400Z‡) VFR Advisory 119.3 133.4  Trenton, NN (CYTR) ATIS 135.45 257.7 App/Dep Con 128.4 324.3 Tower 128.7 236.6 Gnd Con 121.9 275.8 Clnc Del 124.35 286.4  Trenton/Mountain View, NN (CPZ3) Trenton Mil Advisory 268.0  Trois-Rivieres, QC (CYRQ)	H–11C, L–31E, 32F
ATIS 120.825 App Con 124.475 125.4 132.8 Dep Con 127.575 128.8 Tower 118.35 118.7 Gnd Con 118.0 119.1 121.65 121.9 Clnc Del 121.3 (1200–0400Z‡) VFR Advisory 119.3 133.4  Trenton, ON (CYTR) ATIS 135.45 257.7 App/Dep Con 128.4 324.3 Tower 128.7 236.6 Gnd Con 121.9 275.8 Clnc Del 124.35 286.4  Trenton/Mountain View, ON (CPZ3) Trenton Mil Advisory 268.0	H-11C, L-31E, 32I
ATIS 120.825 App Con 124.475 125.4 132.8 Dep Con 127.575 128.8 Tower 118.35 118.7 Gnd Con 118.0 119.1 121.65 121.9 Clnc Del 121.3 (1200–0400Z‡) VFR Advisory 119.3 133.4  Trenton, 0N (CYTR) ATIS 135.45 257.7 App/Dep Con 128.4 324.3 Tower 128.7 236.6 Gnd Con 121.9 275.8 Clnc Del 124.35 286.4  Trenton/Mountain View, 0N (CPZ3) Trenton Mill Advisory 268.0  Trois-Rivieres, 0C (CYRQ) Montreal Center App/Dep Con 128.225 229.2 MF 123.0 (5 NM to 3200')	H-11C, L-31E, 32F H-11C, L-32F
ATIS 120.825 App Con 124.475 125.4 132.8 Dep Con 127.575 128.8 Tower 118.35 118.7 Gnd Con 118.0 119.1 121.65 121.9 Cinc Del 121.3 (1200–0400Z‡) VFR Advisory 119.3 133.4  Trenton, ON (CYTR) ATIS 135.45 257.7 App/Dep Con 128.4 324.3 Tower 128.7 236.6 Gnd Con 121.9 275.8 Cinc Del 124.35 286.4  Trenton/Mountain View, ON (CPZ3) Trenton Mil Advisory 268.0 Trenton Mil Advisory 268.0 Montreal Center App/Dep Con 128.225 229.2 MF 123.0 (5 NM to 3200')  Val-D'or, QC (CYVO)	H-11C, L-31E, 32F H-11C, L-32F
ATIS 120.825 App Con 124.475 125.4 132.8 Dep Con 127.575 128.8 Tower 118.35 118.7 Gnd Con 118.0 119.1 121.65 121.9 Clnc Del 121.3 (1200–0400Z‡) VFR Advisory 119.3 133.4  Trenton, NN (CYTR) ATIS 135.45 257.7 App/Dep Con 128.4 324.3 Tower 128.7 236.6 Gnd Con 121.9 275.8 Clnc Del 124.35 286.4  Trenton/Mountain View, NN (CPZ3) Trenton Mil Advisory 268.0 Trois-Rivieres, QC (CYRQ) Montreal Center App/Dep Con 128.225 229.2 MF 123.0 (5 NM to 3200') Ial-D'or, QC (CYVO) Montreal Center App/Dep Con 125.9 308.3	H-11C, L-31E, 32F H-11C, L-32F
ATIS 120.825 App Con 124.475 125.4 132.8 Dep Con 127.575 128.8 Tower 118.35 118.7 Gnd Con 118.0 119.1 121.65 121.9 Clnc Del 121.3 (1200–0400Z‡) VFR Advisory 119.3 133.4  Irenton, NN (CYTR) ATIS 135.45 257.7 App/Dep Con 128.4 324.3 Tower 128.7 236.6 Gnd Con 121.9 275.8 Clnc Del 124.35 286.4  Irrenton/Mountain View, NN (CPZ3) Trenton Mil Advisory 268.0  Irois-Rivieres, QC (CYRQ) Montreal Center App/Dep Con 128.225 229.2 MF 123.0 (5 NM to 3200') Idal-D'or, QC (CYVO) Montreal Center App/Dep Con 125.9 308.3 MF 118.5 (1030–0325Z‡ 5 NM to 4000')	H–11C, L–31E, 32F H–11C, L–32F H–11E
ATIS 120.825 App Con 124.475 125.4 132.8 Dep Con 127.575 128.8 Tower 118.35 118.7 Gnd Con 118.0 119.1 121.65 121.9 Clnc Del 121.3 (1200–0400Z‡) VFR Advisory 119.3 133.4  Irenton, NN (CYTR) ATIS 135.45 257.7 App/Dep Con 128.4 324.3 Tower 128.7 236.6 Gnd Con 121.9 275.8 Clnc Del 124.35 286.4  Irrenton/Mountain View, NN (CPZ3) Trenton Mil Advisory 268.0  Irois-Rivieres, QC (CYRQ) Montreal Center App/Dep Con 128.225 229.2 MF 123.0 (5 NM to 3200') Idal-D'or, QC (CYVO) Montreal Center App/Dep Con 125.9 308.3 MF 118.5 (1030–0325Z‡ 5 NM to 4000')	H–11C, L–31E, 32F H–11C, L–32F H–11E
ATIS 120.825 App Con 124.475 125.4 132.8 Dep Con 127.575 128.8 Tower 118.35 118.7 Gnd Con 118.0 119.1 121.65 121.9 Cinc Del 121.3 (1200–0400Z‡) VFR Advisory 119.3 133.4  Trenton, ON (CYTR) ATIS 135.45 257.7 App/Dep Con 128.4 324.3 Tower 128.7 236.6 Gnd Con 121.9 275.8 Cinc Del 124.35 286.4  Trenton/Mountain View, ON (CPZ3) Trenton Mil Advisory 268.0  Trenton Mil Advisory 268.0  Trenton Mil Advisory 268.0  Trenton Center App/Dep Con 128.225 229.2 MF 123.0 (5 NM to 3200') Val-D'or, QC (CYVO)  Montreal Center App/Dep Con 125.9 308.3 MF 118.5 (1030–0325Z‡ 5 NM to 4000') Vancouver Intl, BC (CYVR) ATIS 124.6 124.75	H–11C, L–31E, 32F H–11C, L–32F H–11E
ATIS 120.825 App Con 124.475 125.4 132.8 Dep Con 127.575 128.8 Tower 118.35 118.7 Gnd Con 118.0 119.1 121.65 121.9 Clnc Del 121.3 (1200–0400Z‡) VFR Advisory 119.3 133.4  Irenton, 0N (CYTR) ATIS 135.45 257.7 App/Dep Con 128.4 324.3 Tower 128.7 236.6 Gnd Con 121.9 275.8 Clnc Del 124.35 286.4  Irenton/Mountain View, 0N (CPZ3) Trenton Mil Advisory 268.0 Irenton/Mountain View, 0N (CPZ0) Montreal Center App/Dep Con 128.225 229.2 MF 123.0 (5 NM to 3200') Val—D'or, 0C (CYVO) Montreal Center App/Dep Con 125.9 308.3 MF 118.5 (1030–0325Z‡ 5 NM to 4000') Val—O'or, 0C (CYVR) ATIS 124.6 124.75 App Con 128.6 128.17 352.7 (Outer) 133.1 134.225 352.7 (Inner)	H–11C, L–31E, 32F H–11C, L–32H H–11B
ATIS 120.825 App Con 124.475 125.4 132.8 Dep Con 127.575 128.8 Tower 118.35 118.7 Gnd Con 118.0 119.1 121.65 121.9 Cinc Del 121.3 (1200–0400Z‡) VFR Advisory 119.3 133.4  Trenton, ON (CYTR) ATIS 135.45 257.7 App/Dep Con 128.4 324.3 Tower 128.7 236.6 Gnd Con 121.9 275.8 Cinc Del 124.35 286.4  Trenton/Mountain View, ON (CPZ3) Trenton Mil Advisory 268.0  Trenton Mil Advisory 268.0  Trenton Mil Advisory 268.0  Trenton Center App/Dep Con 128.225 229.2 MF 123.0 (5 NM to 3200') Val-D'or, QC (CYVO)  Montreal Center App/Dep Con 125.9 308.3 MF 118.5 (1030–0325Z‡ 5 NM to 4000') Vancouver Intl, BC (CYVR) ATIS 124.6 124.75	H-11C, L-31E, 32F H-11C, L-31E, 32F H-11C, L-32H H-11B

CILITY NAME	CHART & PANEL
Victoria Intl, BC (CYYJ)	H-1B, L-1E
ATIS 118.8 (1400-0800Z‡)	
App Con 125.95 308.4 Dep Con 133.85 308.4	
Tower 119.1 (Outer) 119.7 (Inner) 239.6	
Gnd Con 121.9 361.4 (1400–0800Z‡ OT ctc Kamloops 119.7)	
Cinc Del 126.4 (1400-0800Z‡)	
Victoriaville, QC (CSR3)	L-32H
Montreal Center App Con 132.35 Waterville/Kings Co Muni, NS (CCW3)	L-32J
Greenwood Trml App/Dep Con 120.6 335.9	L-323
Greenwood Tower 119.5 324.3	
Wiarton, ON (CYVV)	H-11B, L-31D
Toronto Center App/Dep Con 132.575	11-110, 1-010
MF 122.2 (5 NM to 3700')	
Windsor, ON (CYQG)	H-10G, L-8J
ATIS 134.5 (1130–0330Z‡)	11–100, 1–03
Detroit App/Dep Con 126.85 127.5 134.3 348.3 363.2	
Tower 124.7 (1130–0330Z‡) Gnd Con 121.7	
MF 124.7 (0330–1130Z‡ 6 NM irregular shape to below 3000')	
VFR Advisory Detroit App Con 134.3	
Yarmouth, NS (CYOI)	H-11E, L-32
Moncton Center App/Dep Con 123.9 368.5 MF 123.0 (5 NM to 3100')	11-111, 1-32
(2 1 )	
MEXICO	
CILITY NAME	CHART & PANEL
Abraham Gonzalez Intl (MMCS)	H-4K, L-6F
Juarez App Con 119.9 Juarez Tower 118.9	
Del Norte Intl (MMAN)	H-7B, L-20G
ATIS 127.55 (1300-0300Z‡)	
Monterrey App 119.75 120.4 Tower 118.6	
Durango Intl (MMDO)	H-7A
ATIS 132.1	
Tower 118.1 Durango Info 122.3	
General Abelardo L Rodriguez Intl (MMTJ)	H-4H, L-4H
ATIS 127.9	
Tijuana App Con 119.5 120.3 Tijuana Tower 118.1 Clnc Del 122.35	
Tijuana Info 132.1	
General Lucio Blanco Intl (MMRX)	H-7B, L-20H
Reynosa App Con 118.8 Reynosa Tower 118.8	
General Mariano Escobedo Intl (MMMY)	H-7B, L-20G
ATIS 127.7	
Monterrey App Con 119.75 120.4 Monterrey Tower 118.1 Gnd Con 121.9	
General R Fierro Villalobos Intl (MMCU)	L-6
ATIS 127.9	
Chihuahua App Con 121.0 Chihuahua Tower 118.4	
General Rodolfo Sanchez Taboada Intl (MMML)	H-4H, L-4J, 5A
ATIS 127.6	
Mexicali App Con 118.2 Mexicali Tower 118.2 Mexicali Info 123.9 122.3	
General Servando Canales (MMMA)	H-7C, L-21A
General Servando Canales (MMMA)  Matamoros App Con 118.0 Matamoros Tower 118.0	·
General Servando Canales (MMMA)  Matamoros App Con 118.0 Matamoros Tower 118.0  Plan De Guadalupe Intl (MMIO)	·
General Servando Canales (MMMA)  Matamoros App Con 118.0 Matamoros Tower 118.0  Plan De Guadalupe Intl (MMIO)  Saltillo App Con 127.4 Saltillo Tower 118.4	H–7B
General Servando Canales (MMMA) Matamoros App Con 118.0 Matamoros Tower 118.0 Plan De Guadalupe Intl (MMIO) Saltillo App Con 127.4 Saltillo Tower 118.4 Quetzalcoatl Intl (MMNL)	H–7B
General Servando Canales (MMMA)  Matamoros App Con 118.0 Matamoros Tower 118.0  Plan De Guadalupe Intl (MMIO)  Saltillo App Con 127.4 Saltillo Tower 118.4  Quetzalcoatl Intl (MMNL)  Nuevo Laredo App Con 118.3 Nuevo Laredo Tower 118.3	H–7C, L–21A H–7B H–7B, L–20G
General Servando Canales (MMMA) Matamoros App Con 118.0 Matamoros Tower 118.0 Plan De Guadalupe Intl (MMIO) Saltillo App Con 127.4 Saltillo Tower 118.4 Quetzalcoatl Intl (MMNL)	H–7B

In support of the Federal Aviation Administration's Runway Incursion Program, selected towered airport diagrams have been published in the Airport Diagram section of the A/FD. Diagrams will be listed alphabetically by associated city and airport name. Airport diagrams, depicting runway and taxiway configurations, will assist both VFR and IFR pilots in ground taxi operations. The airport diagrams in this publication are the same as those published in the U.S. Terminal Procedures Publications. For additional airport diagram legend information see the U.S. Terminal Procedures Publication.

NOTE: Some text data published under the individual airport in the front portion of the A/FD may be more current than the data published on the Airport Diagrams. The airport diagrams are updated only when significant changes occur.

## GENERAL INFORMATION

## PILOT CONTROLLED AIRPORT LIGHTING SYSTEMS

Available pilot controlled lighting (PCL) systems are indicated as follows:

- 1. Approach lighting systems that bear a system identification are symbolized using negative symbology, e.g., 🖏 💽 😧
- 2. Approach lighting systems that do not bear a system identification are indicated with a negative "n" beside the name.

A star (\*) indicates non-standard PCL, consult the individual airport in the front portion of the A/FD, e.g., 0

To activate lights use frequency indicated in the communication section of the chart with a  $m{0}$  or the appropriate lighting system identification e.g., UNICOM 122.8 0, 🚳, 🛇

KEY MIKE	

7 times within 5 seconds

5 times within 5 seconds 3 times within 5 seconds Highest intensity available

**FUNCTION** Medium or lower intensity (Lower REIL or REIL-off)

Lowest intensity available (Lower REIL or REIL-off)

### CHART CURRENCY INFORMATION

Date of latest change Orig 00365 -- Amdt 11A 99365--FAA procedure amendment number—

The Chart Date indentifies the Julian date the chart was added to the volume or last revised for any reason. The first two digits indicate the year, the last three digits indicate the day of the year (001 to 365/6) in which the latest addition or change was first published.

The Procedure Amendment Number precedes the Chart Date, and changes any time instrument information (e.g., DH, MDA, approach routing, etc.) changes. Procedure changes also cause the Chart Date to change.

## MISCELLANEOUS

- Indicates a non-continuously operating facility, see the individual airport in the front portion of the A/FD.
- Indicates control tower temporarily closed UFN.

09071 LEGEND

## INSTRUMENT APPROACH PROCEDURES (CHARTS)

#### AIRPORT DIAGRAM Runways Helicopter Alighting Areas (H) [H] [H] [A] [H] Other Than Stopways, Taxiways, . Displaced Hard Negative Symbols used to identify Copter Procedures Hard Surface Parking Areas, Threshold Surface landing point...... H 👪 H Water Runways xxx Runway Threshold elevation.....THRE 123 Runway TDZ elevation......TDZE 123 Closed Closed Meta Under Runway Taxiway Construction Surface -- 0.3% DOWN (shown when runway slope is greater than ARRESTING GEAR: Specific arresting gear systems; or equal to 0.3%) e.g., BAK12, MA-1A etc., shown on airport diagrams, not applicable to Civil Pilots. Military Pilots refer to Runway Slope measured to midpoint on runways appropriate DOD publications. 8000 feet or longer. \_\_uni-directional bi-directional ₹ Jet Barrier U.S. Navy Optical Landing System (OLS) "OLS" location is shown because of its height of ARRESTING SYSTEM approximately 7 feet and proximity to edge of runway may create an obstruction for some types REFERENCE FEATURES of aircraft. Buildings Approach light symbols are shown in the Tanks..... Flight Information Handbook. Airport digaram scales are variable. Airport Beacon #...... ☆ True/magnetic North orientation may vary from Radar Reflectors. diagram to diagram Control Tower #..... Coordinate values are shown in 1 or ½ minute Hot Spot ..... increments. They are further broken down into 6 second ticks, within each 1 minute increments. # When Control Tower and Rotating Beacon are co-located, Beacon symbol will be used and Positional accuracy within ±600 feet unless otherwise further identified as TWR noted on the chart. Runway length depicted is the physical length of the runway (end-to-end, including displaced thresholds All new and revised airport diagrams are shown referif any) but excluding areas designated as stopways. enced to the World Geodetic System (WGS) (noted on appropriate diagram), and may not be compatible A D symbol is shown to indicate runway declared distance information available, see appropriate A/FD, with local coordinates published in FLIP. (Foreign Only) Alaska or Pacific Supplement for distance information. Runway Weight Bearing Capacity/or PCN Pavement Classification Number is shown as a codified expression. Refer to the appropriate Supplement/Directory for applicable codes e.g., RWY 14-32 S75, T185, ST175, TT325 PCN 80 F/D/X/U Rwy 2 ldg 8000' **FIELD** Runway Displaced Threshold **ELEV** Slope Runway 174 **EMAS** Identification **BAK-12** 1200 X 200 0.7% UP 1000 X 200 9000 X 200 023.2°() Arresting System Operations ELEV Runway End (in feet) 164 Runway Dimensions Runway Heading Elevation (in feet) Stopway Dimensions (Magnetic) (in feet) SCOPE Airport diagrams are specifically designed to assist in the movement of ground traffic at locations with complex

Airport diagrams are specifically designed to assist in the movement of ground traffic at locations with complex runway/taxiway configurations and provide information for updating Computer Based Navigation Systems (I.E., INS, GPS) aboard aircraft. Airport diagrams are not intended to be used for approach and landing or departure operations. For revisions to Airport Diagrams: Consult FAA Order 7910.4.

## **LEGEND**

# AIRPORT DIAGRAMS HOT SPOTS

An "Airport surface hot spot" is a location on an aerodrome movement area with a history or potential risk of collision or runway incursion, and where heightened attention by pilots/drivers is necessary.

A "hot spot" is a runway safety related problem area on a airport that presents increased risk during surface operations. Typically it is a complex or confusing taxiway/taxiway or taxiway/runway intersection. The area of increased risk has either a history of or potential for runway incursions or surface incidents, due to a variety of causes, such as but not limited to: airport layout, traffic flow, airport marking, signage and lighting, situational awareness and training. Hot spots are depicted on airport diagrams as open circles or polygons designated as "HOT<sup>1</sup>", "HOT<sup>2</sup>", etc. and tabulated in the list below with a brief description of each hot spot. Hot spots will remain charted on airport diagrams until such time the increased risk has been reduced or eliminated.

#### ILLINOIS CHICAGO HOT1 CHICAGO-OHARE INTL (ORD) Taxiing traffic on Twy R cannot stop on Twy R between Rwv 9R-27L and Rwv 4L-22R. $HOT^2$ Rwv 27L arrivals prohibited from turning onto Rwy 4L-22R without ATC clearance. $HOT^3$ Aircraft northeast bound on Twy B turning right onto Twy H use caution - close proximity to Rwy 9R/27L. HOT4 Landing Rwy 22R traffic must receive clearance to cross Rwy 9R-27L on Twy A1. HOT<sup>5</sup> Rwy 14L arrivals exiting Twy P4 use caution - close proximity to Rwy 9R-27L. HOT6 Aircraft northeast bound on Twy P turning left onto Twy H use caution - close proximity to Rwy 9R/27L. $HOT^7$ Aircraft turning left onto Twy K from Twy T10 use caution to avoid inadvertent turn onto Twv M. HOT<sup>8</sup> Twy S5 - north bound traffic only exiting Rwy 4R. HOT<sup>9</sup> Traffic inbound to the terminals from Twy G and Twy E can expect a right turn on Twy Z to avoid active rwys. HOT<sup>10</sup> Intersection of Rwv 14L and Rwv 27R - Rwv 14L not an exit. Rwy 9L-27R exits located at the far ends of the rwy. MOLINE QUAD CITY INTL (MLI) HOT1 Rwy 31 Non-standard hold position. Distance to edge of rwy 698'. INDIANA EVANSVILLE EVANSVILLE RGNL (EVV) HOT1 Pilots taxiing to Rwy 09 enter the rwy mid-field. Do not taxi to the "numbers" without ATC clearance. Rwv 09-27 is a short distance from the General Aviation Ramp-use appropriate vigilance. $HOT^2$ Pilots cleared to taxi to Rwv 27 sometimes enter the Rwy 27 without a clearance. HOT3 Rwy 18-36 in close proximity to General Aviation Ramp-use appropriate vigilance. HOT4 Rwy 18-36 in close proximity to General Aviation Ramp-use appropriate vigilance. MICHIGAN IACKSON JACKSON CO-REYNOLDS FLD (JXN) HOT1 Caution confusing signage. HOT2 No signage.

# WISCONSIN

JANESVILLE

SOUTHERN WISCONSIN RGNL (JVL) HOT<sup>1</sup> Rwy 32 and Rwy 36 approach ends are closely

aligned and may be confused when lining up for

departure

MILWAUKEE HOT<sup>1</sup> Pilots taxiing northbound on Twy E for an

GENERAL MITCHELL INTL (MKE) intersection departure on Rwy 19R at Twy V can end
up entering Rwy 7L-25R if they miss the right turn

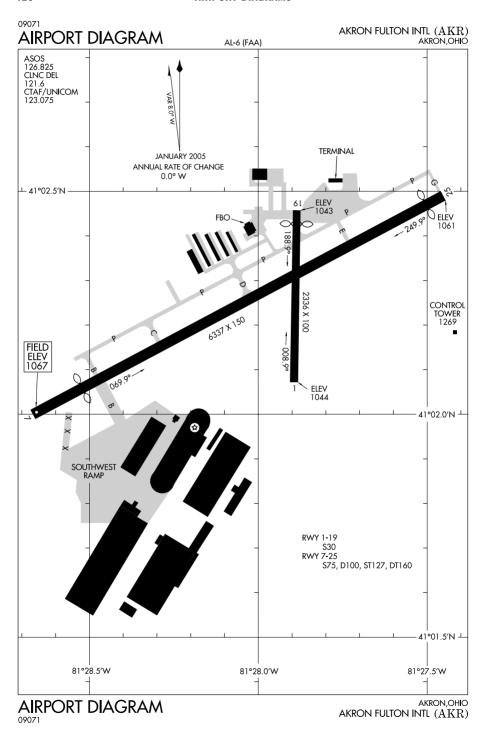
up entering Rwy 7L–25R if they miss the right turn for Twy V. To avoid a runway incursion, pilots on Twy E should use extreme caution approaching Rwy

7L-25R.

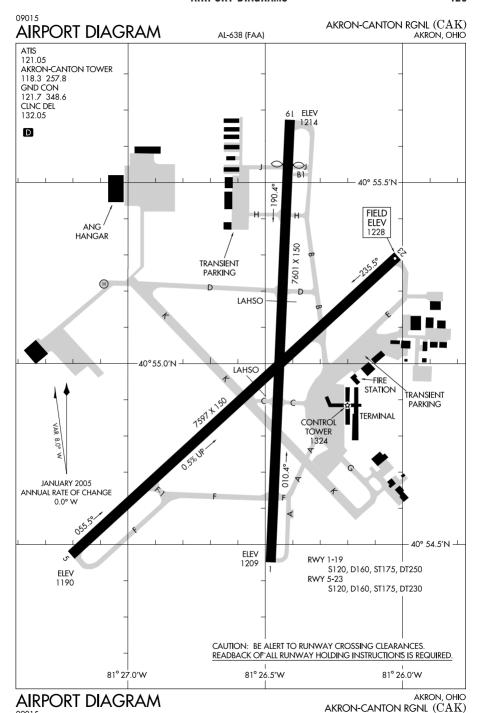
 ${
m HOT}^2$  Use caution in the area of Twy M and Rwy 1L-19R.

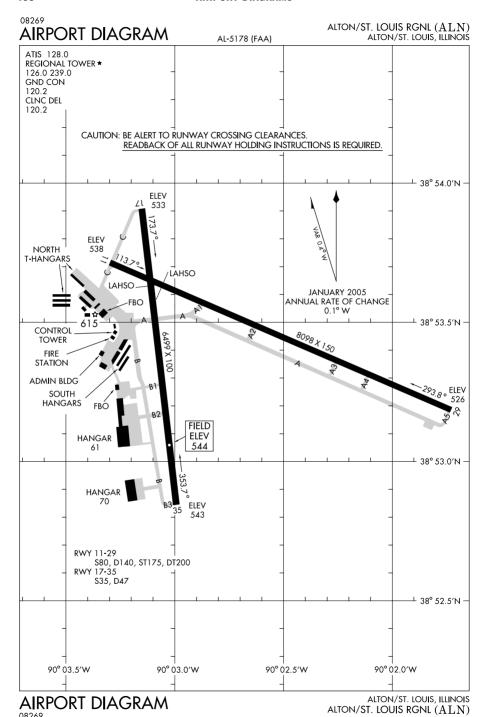
Pavement widens out as the taxiway approaches

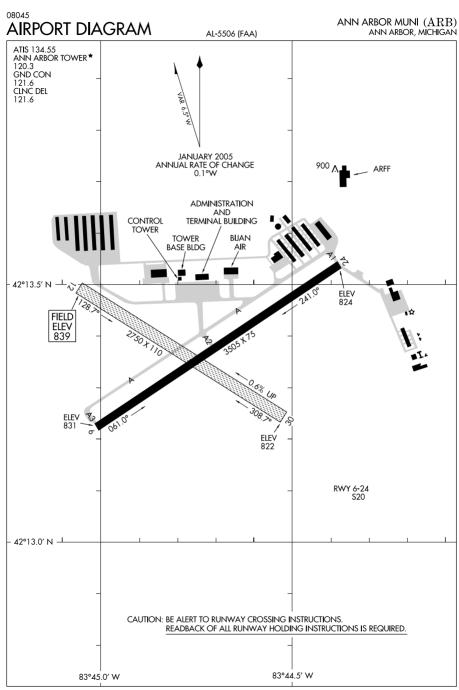
the runway and may cause confusion.



EC, 17 DEC 2009 to 11 FEB 2010

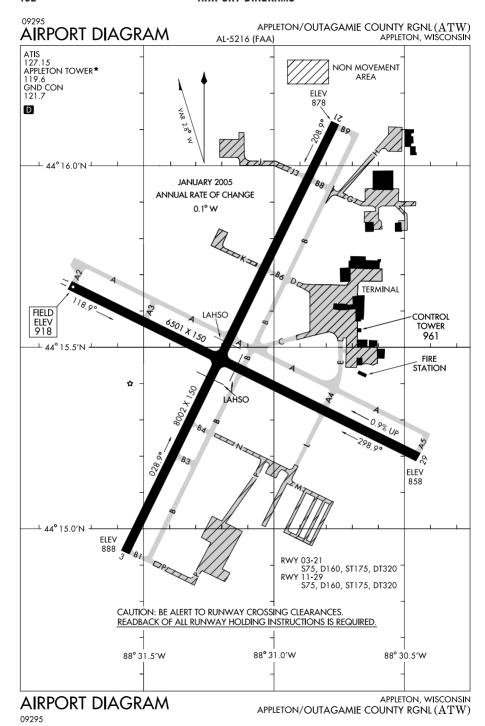




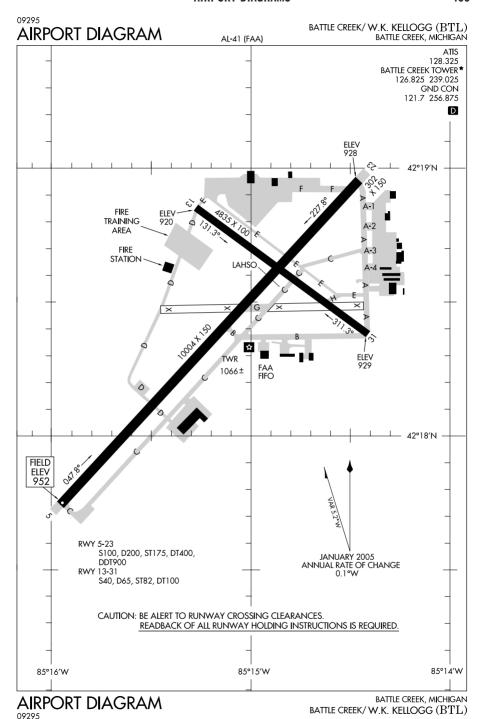


AIRPORT DIAGRAM

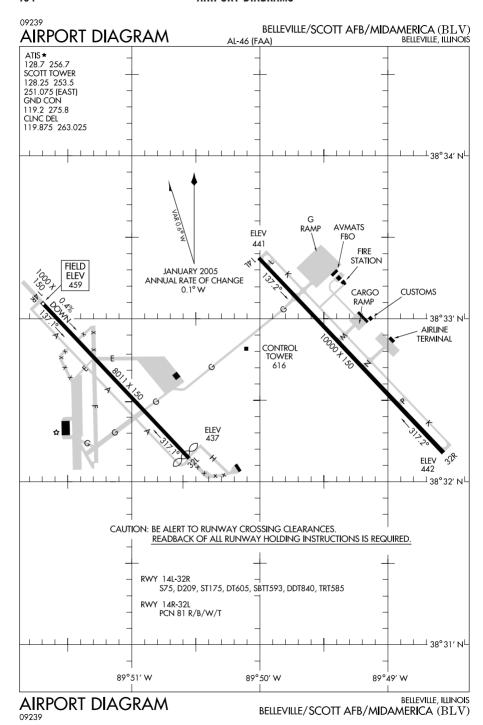
ANN ARBOR, MICHIGAN ANN ARBOR MUNI  $(ARB)\,$ 



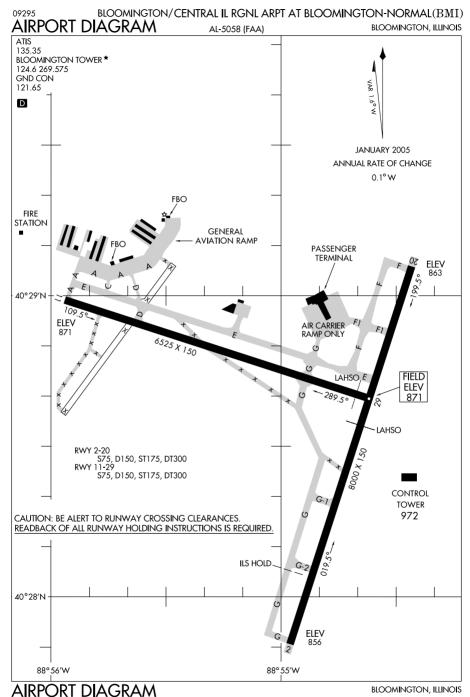
EC, 17 DEC 2009 to 11 FEB 2010



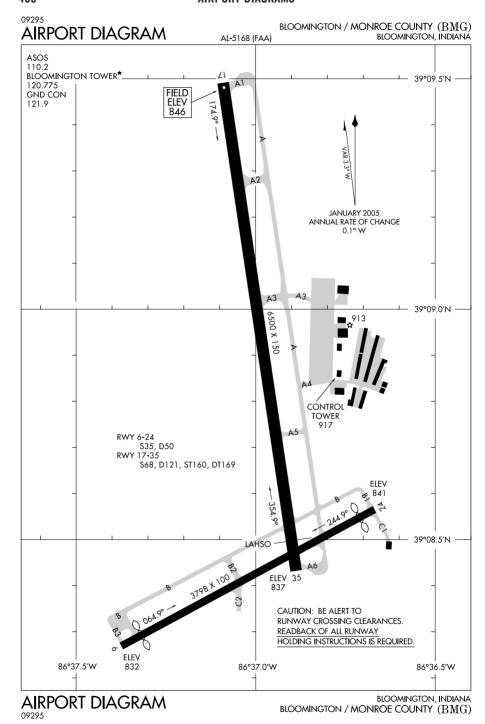
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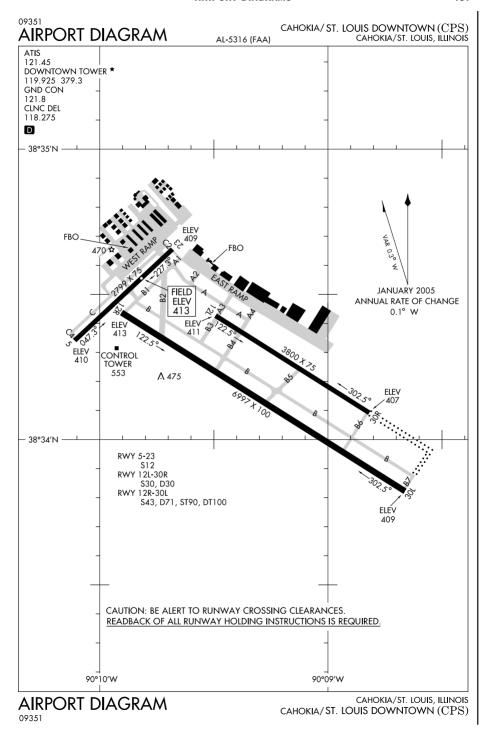
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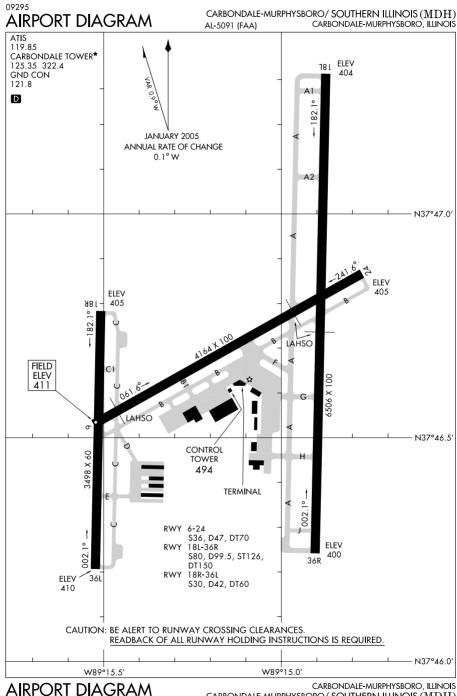


09295 BLOOMINGTON/CENTRAL IL RGNL ARPT AT BLOOMINGTON-NORMAL(BMI)

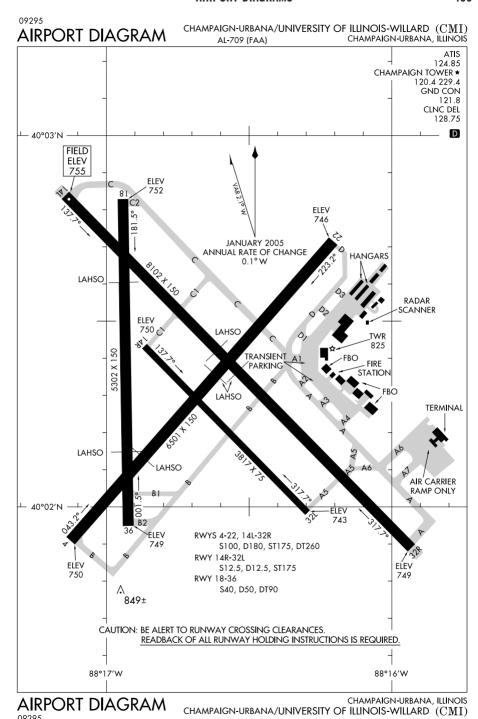


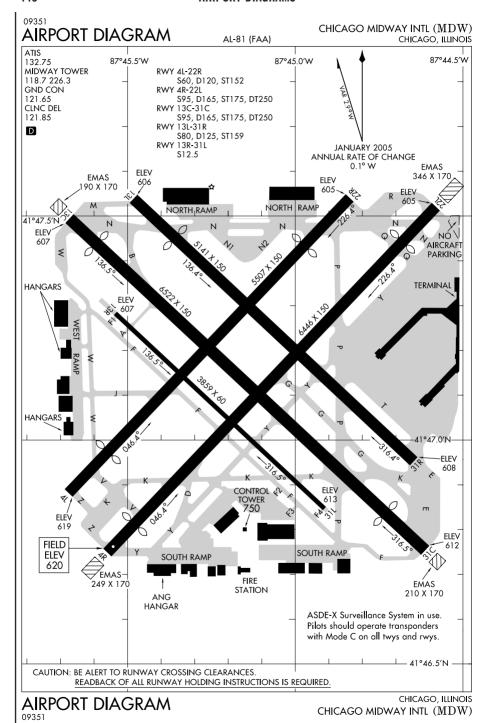
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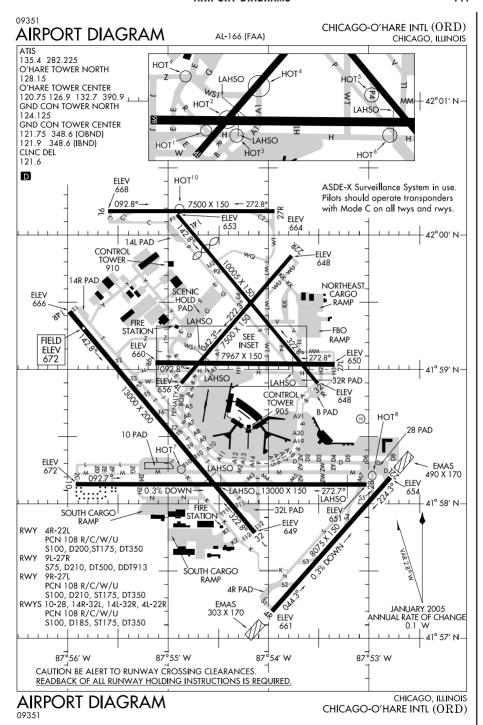


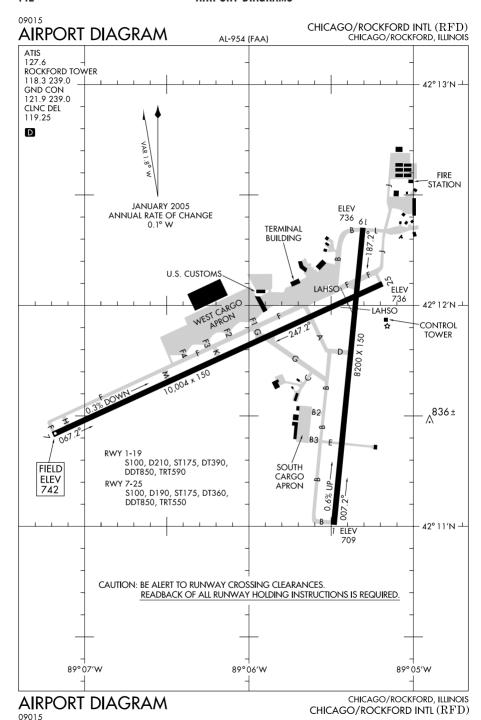


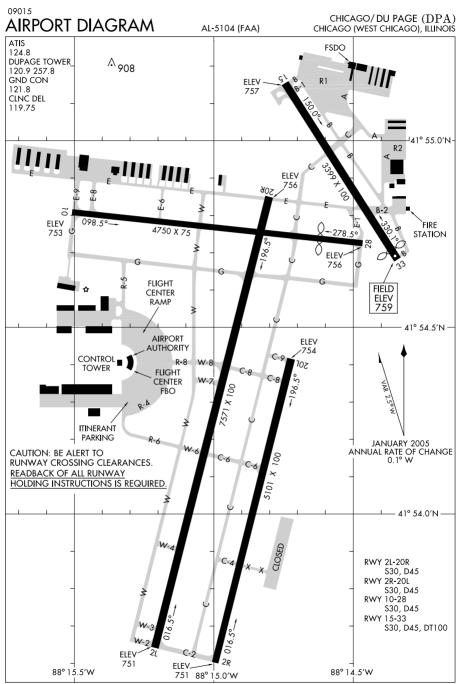
CARBONDALE-MURPHYSBORO/ SOUTHERN ILLINOIS (MDH)





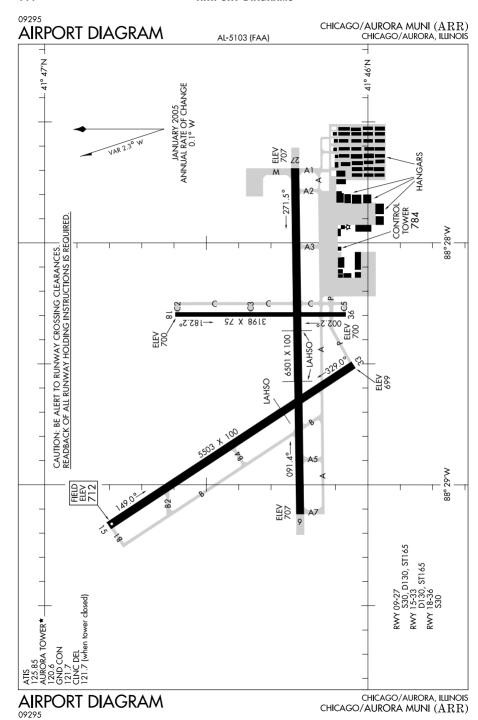




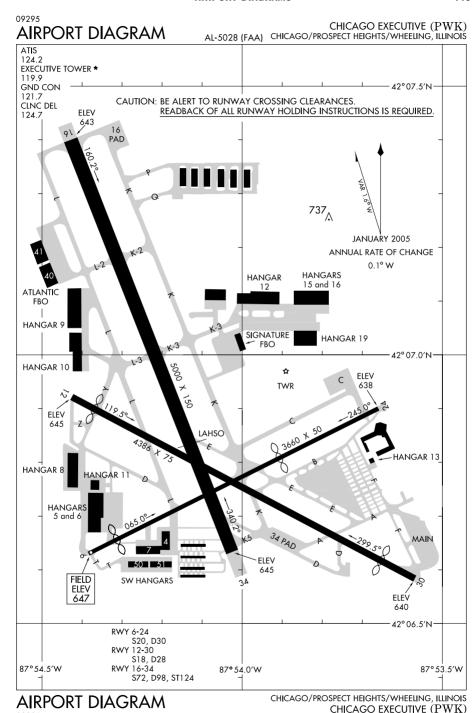


AIRPORT DIAGRAM

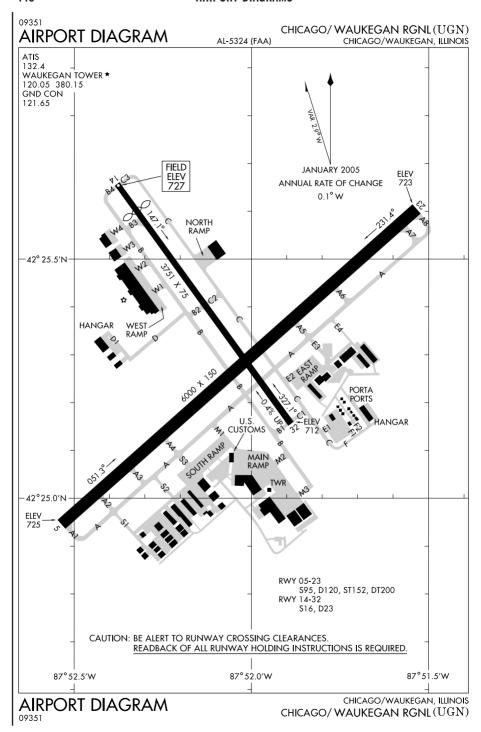
CHICAGO (WEST CHICAGO), ILLINOIS CHICAGO/DU PAGE (DPA)



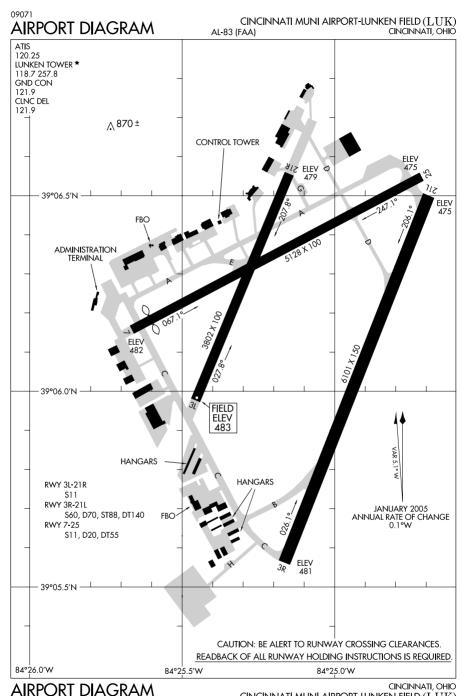
EC, 17 DEC 2009 to 11 FEB 2010



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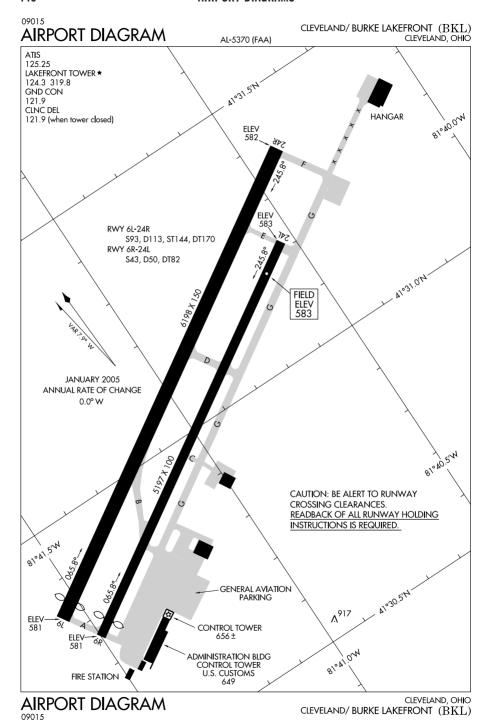


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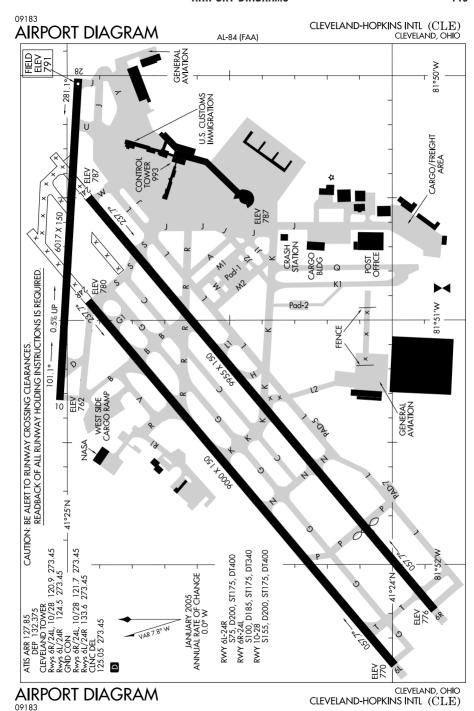


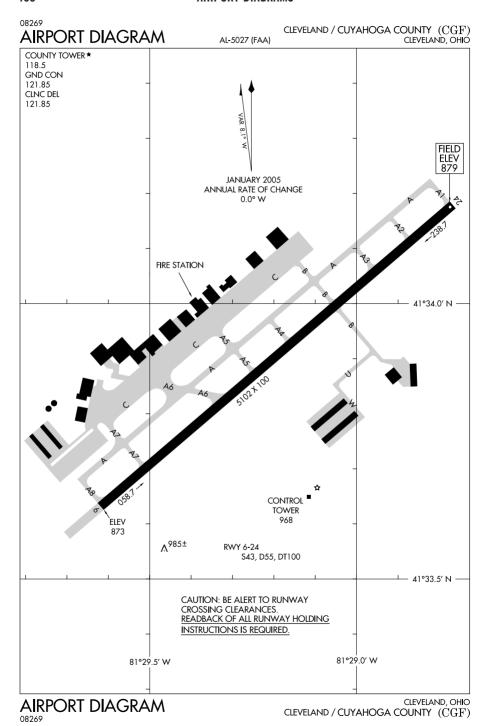
09071

CINCINNATI MUNI AIRPORT-LUNKEN FIELD (LUK)

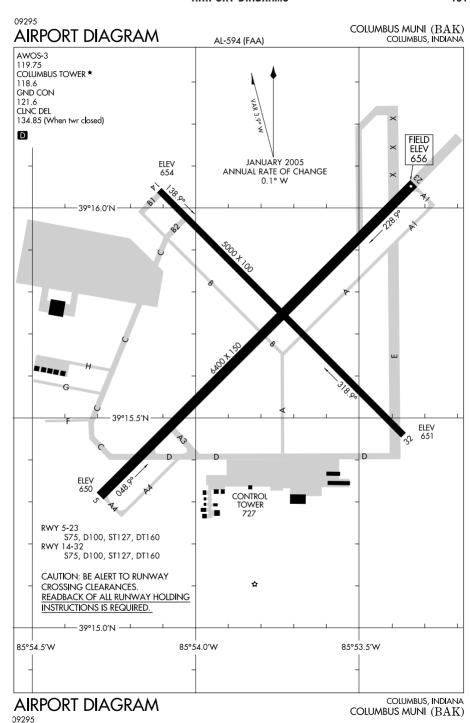


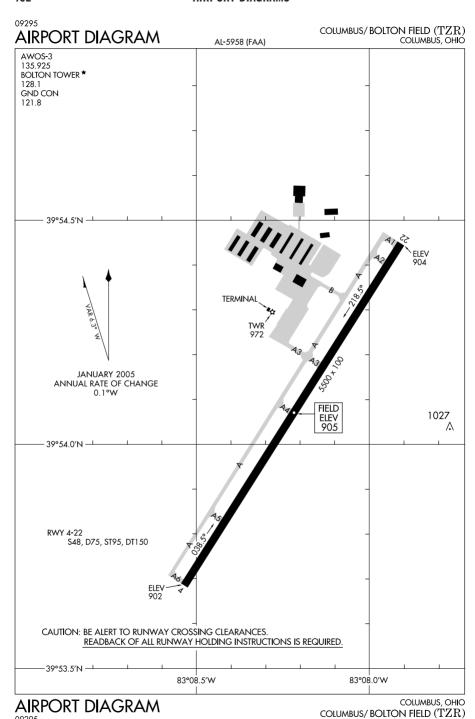
EC, 17 DEC 2009 to 11 FEB 2010



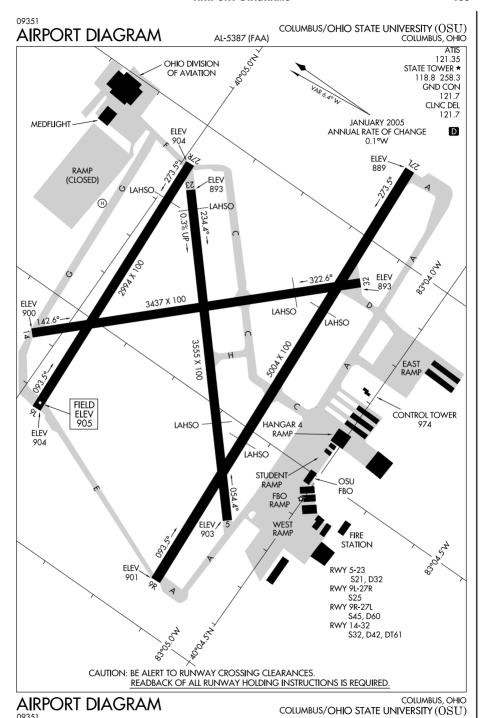


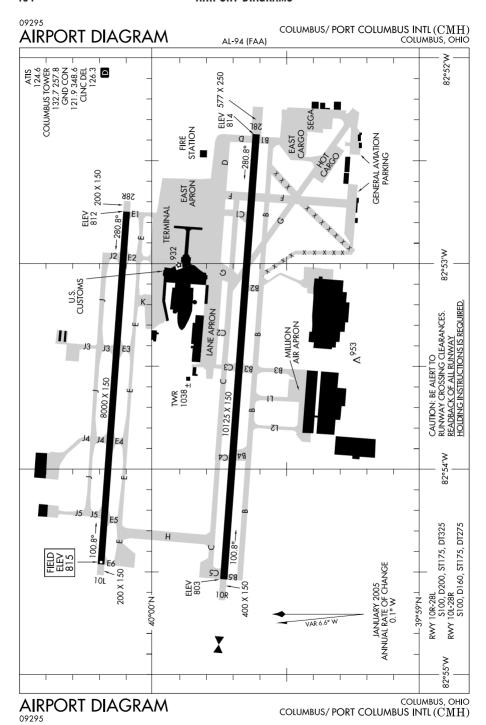
EC, 17 DEC 2009 to 11 FEB 2010



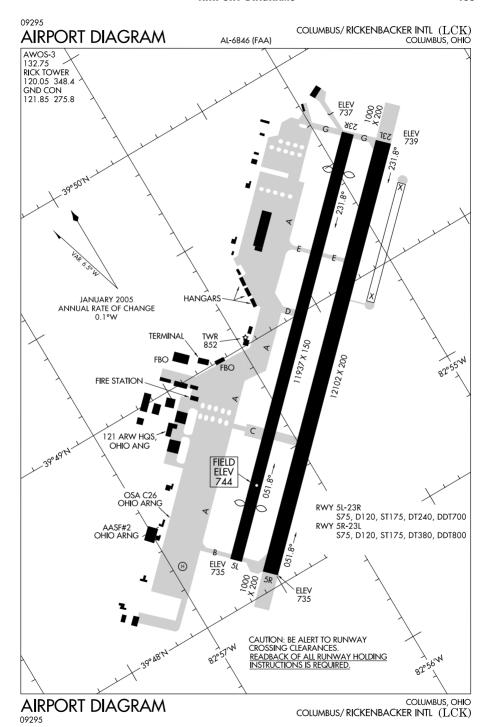


EC, 17 DEC 2009 to 11 FEB 2010

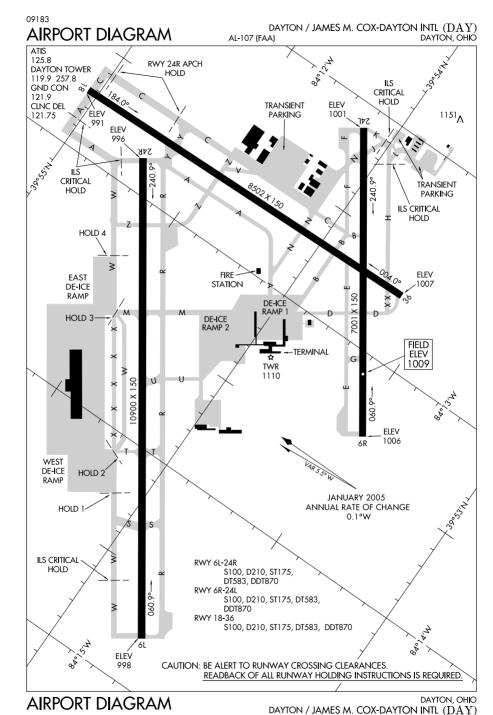




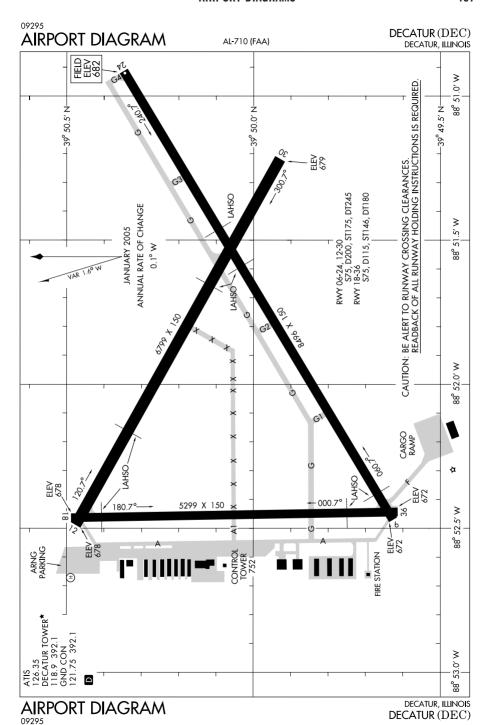
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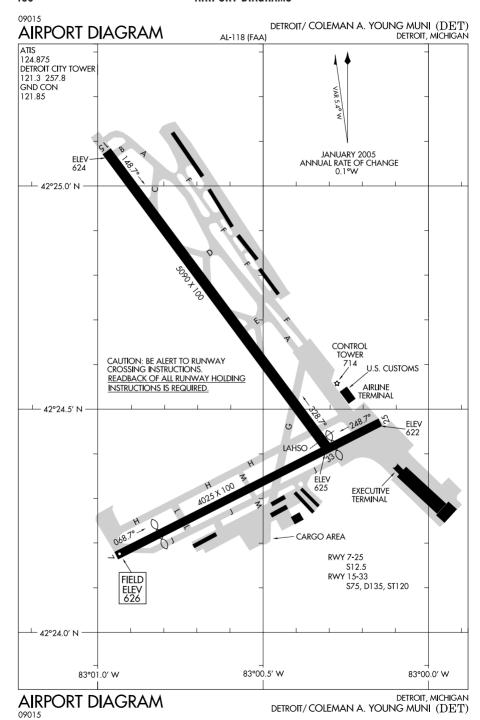


EC, 17 DEC 2009 to 11 FEB 2010

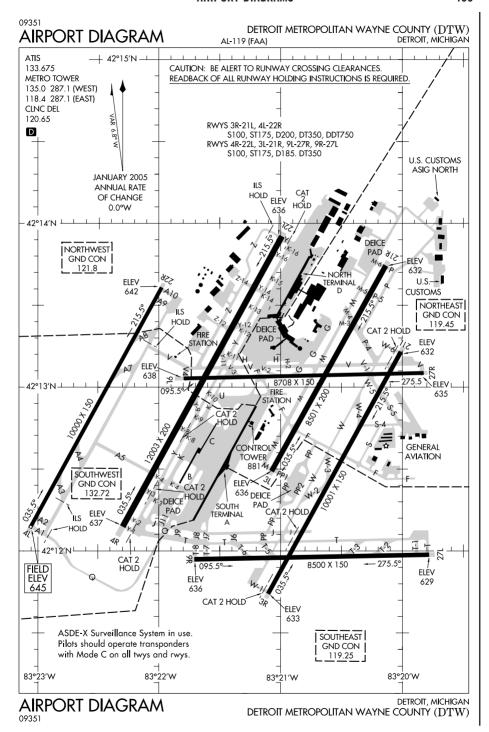


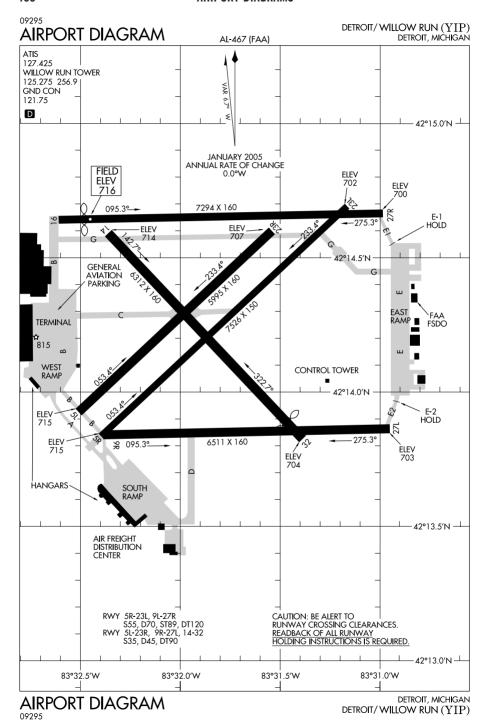
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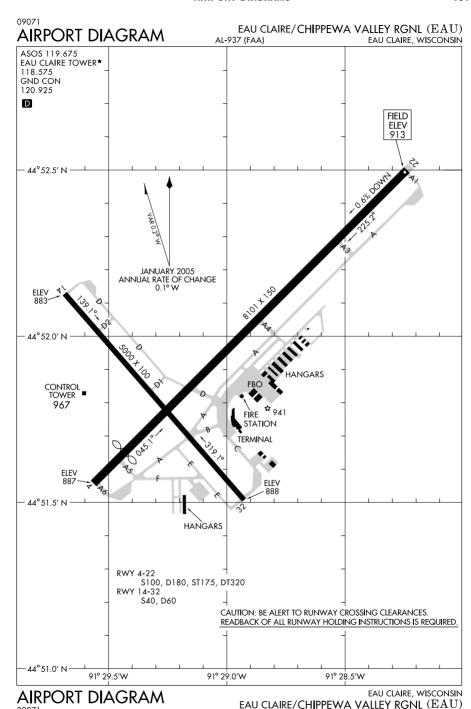


EC, 17 DEC 2009 to 11 FEB 2010



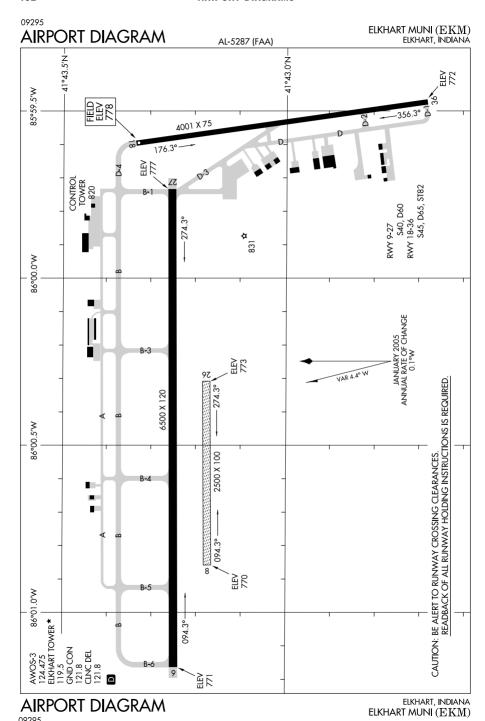


EC, 17 DEC 2009 to 11 FEB 2010

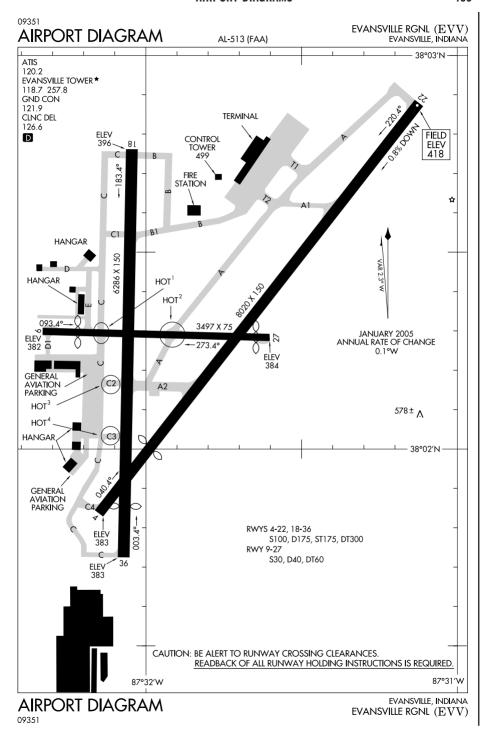


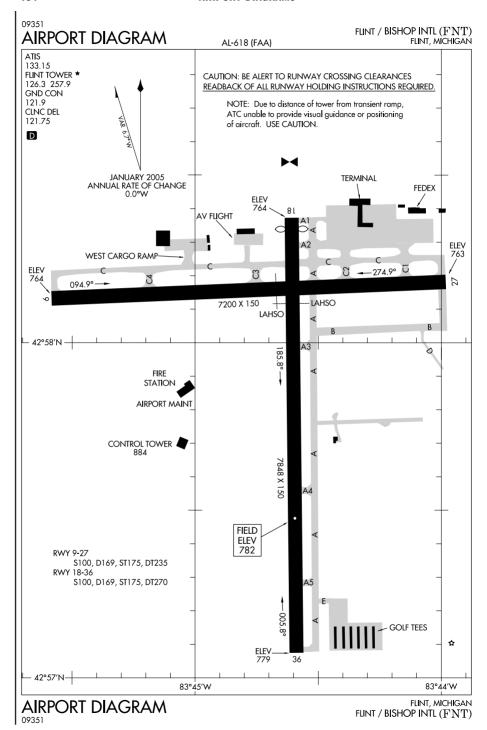
EC, 17 DEC 2009 to 11 FEB 2010

09071

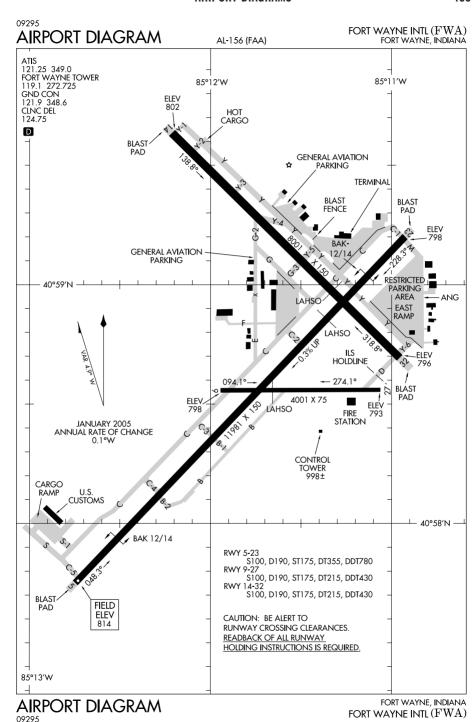


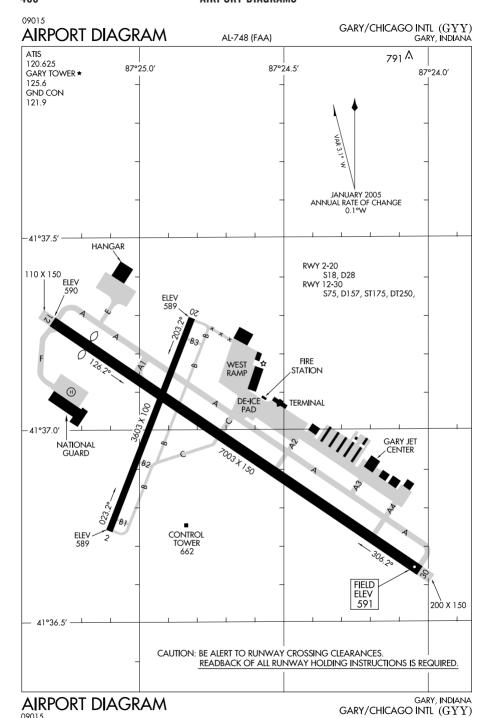
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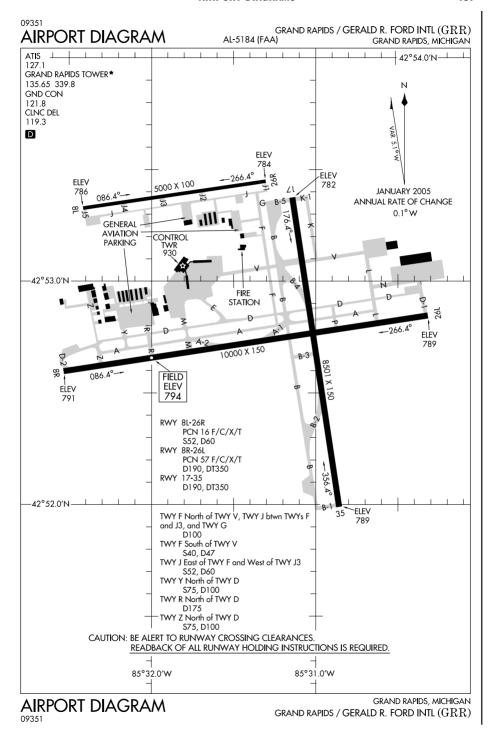


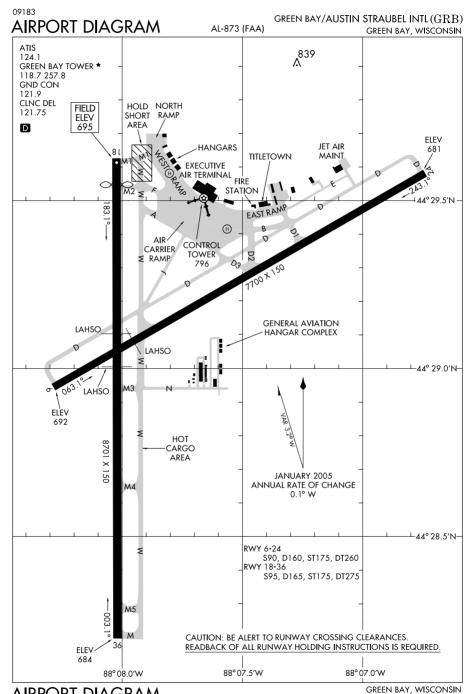
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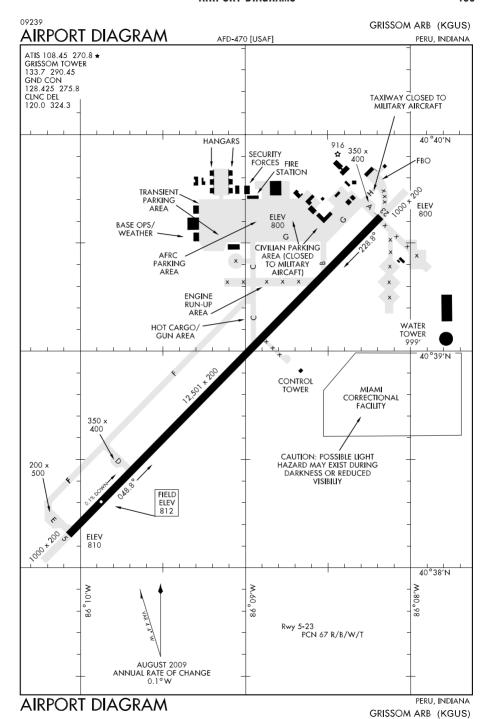


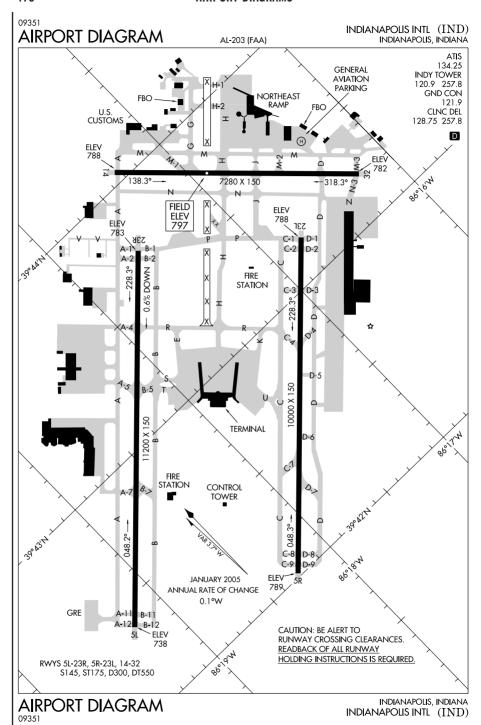
EC, 17 DEC 2009 to 11 FEB 2010



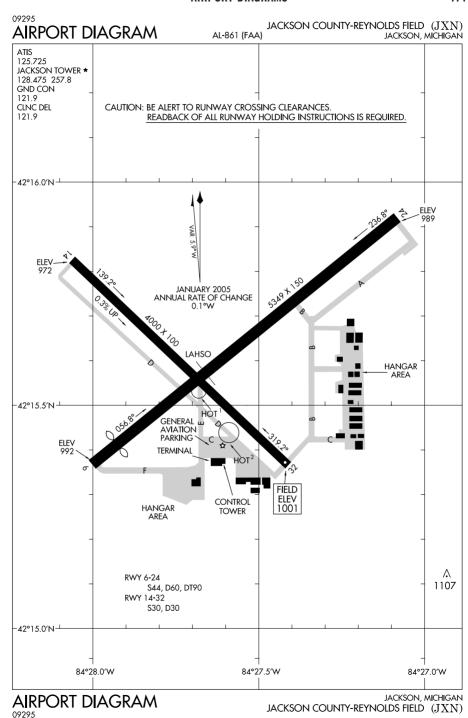


GREEN BAY/AUSTIN STRAUBEL INTL (GRB)

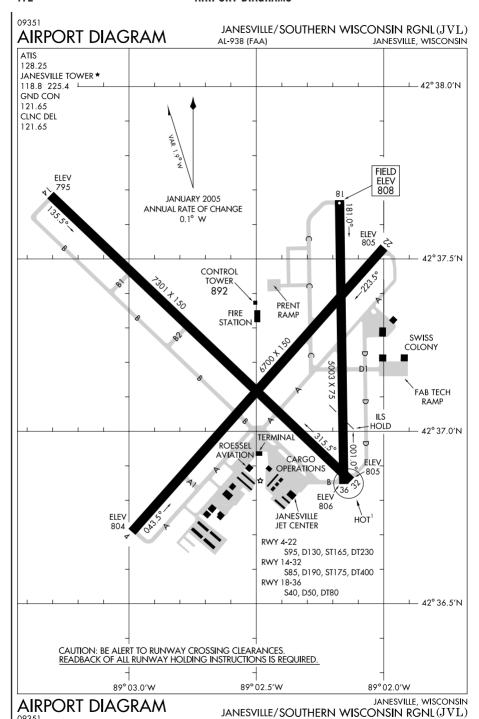


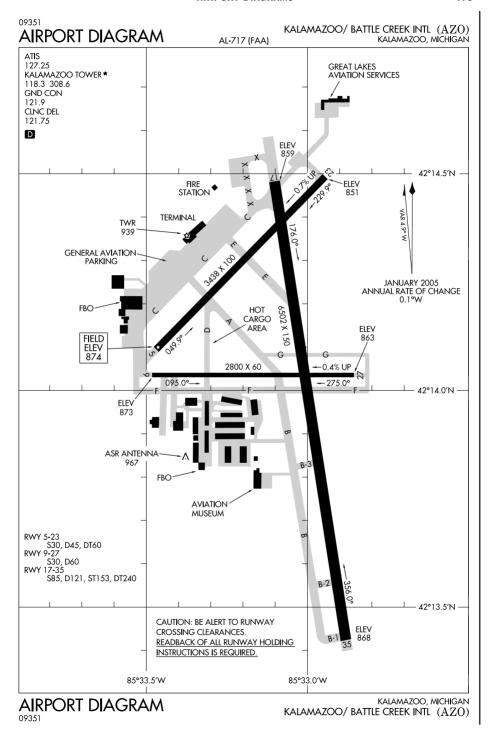


EC, 17 DEC 2009 to 11 FEB 2010

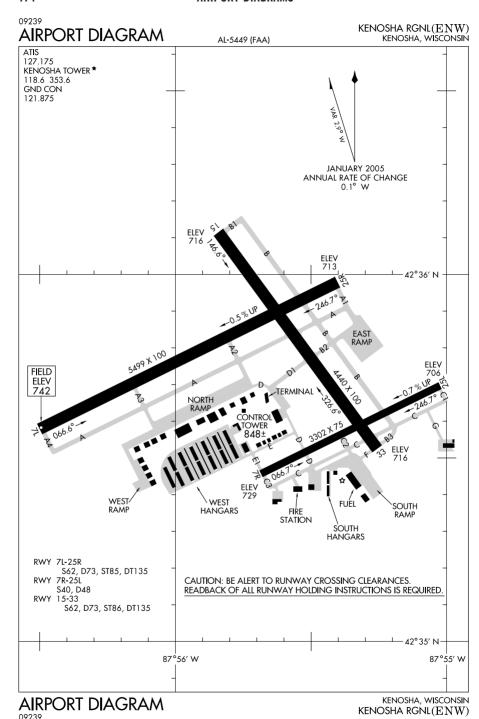


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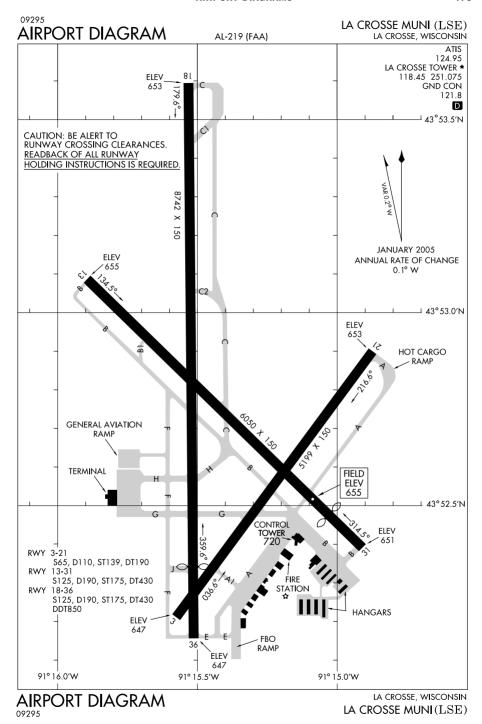




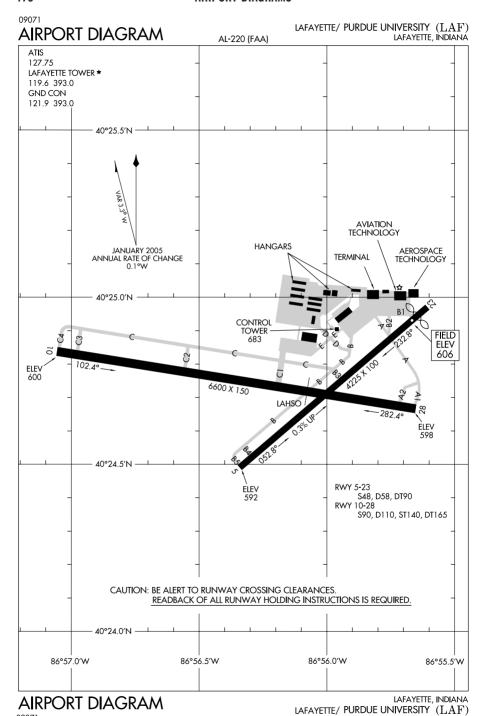
EC, 17 DEC 2009 to 11 FEB 2010

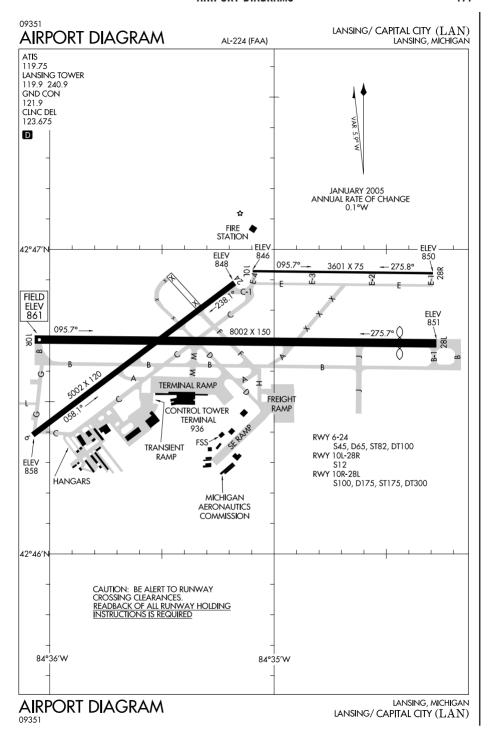


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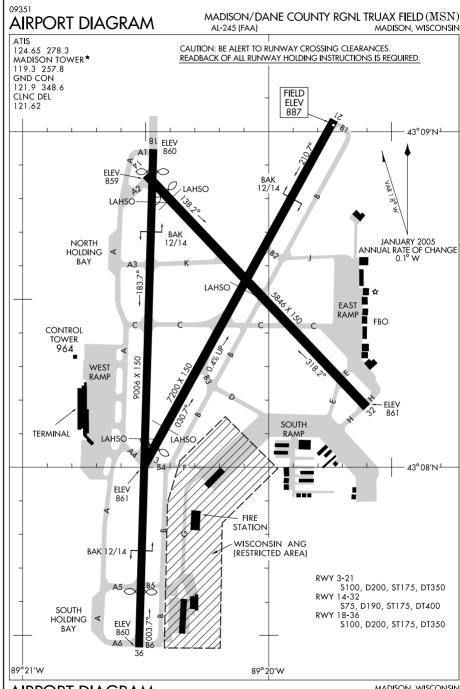


EC, 17 DEC 2009 to 11 FEB 2010

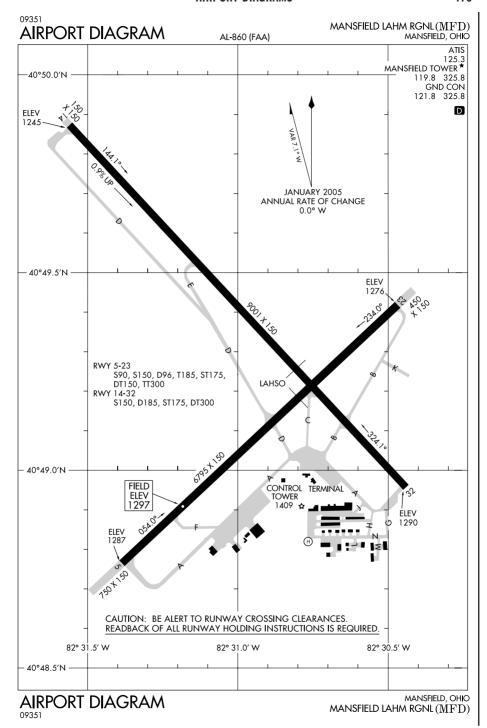


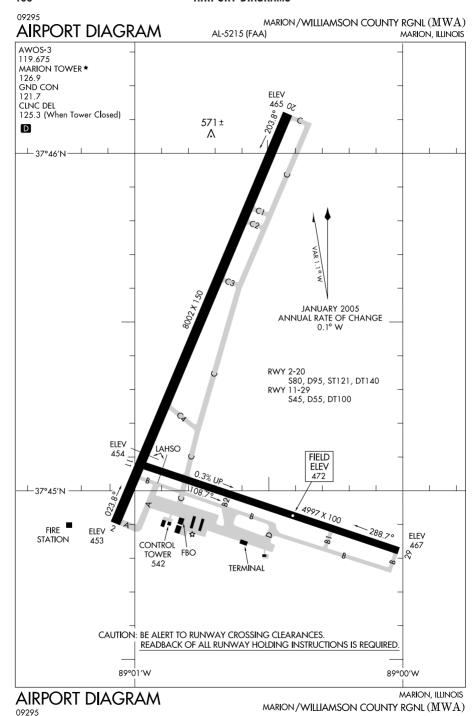


EC, 17 DEC 2009 to 11 FEB 2010

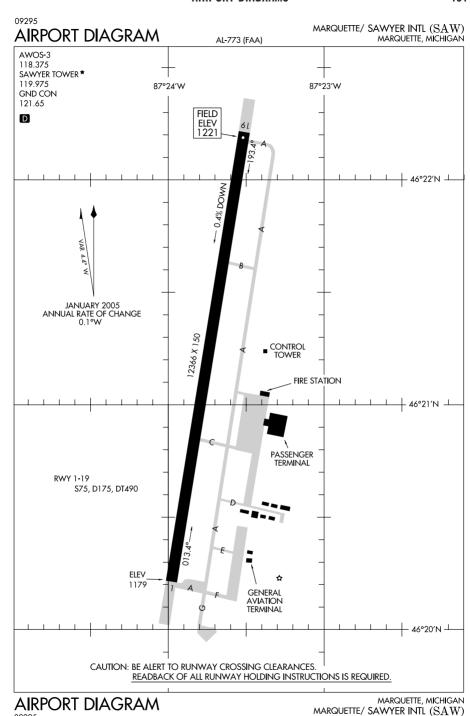


 $\label{eq:madison_madison} \text{Madison/Dane County RGNL Truax Field } (MSN)$ 

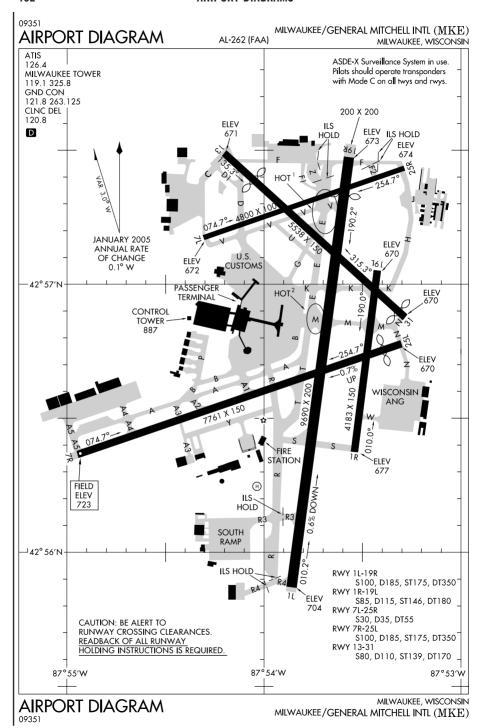


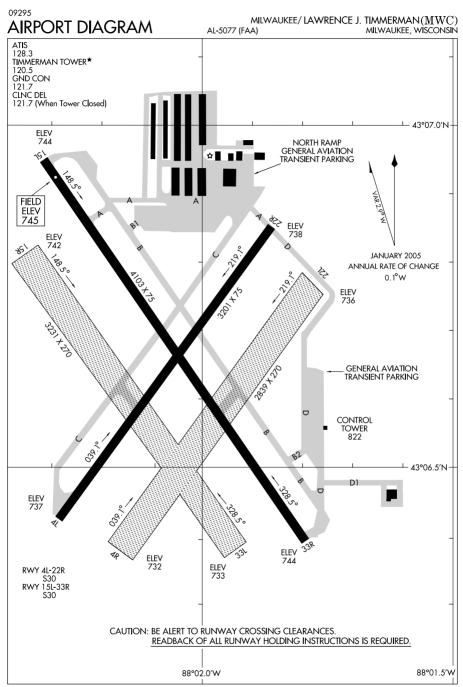


EC, 17 DEC 2009 to 11 FEB 2010



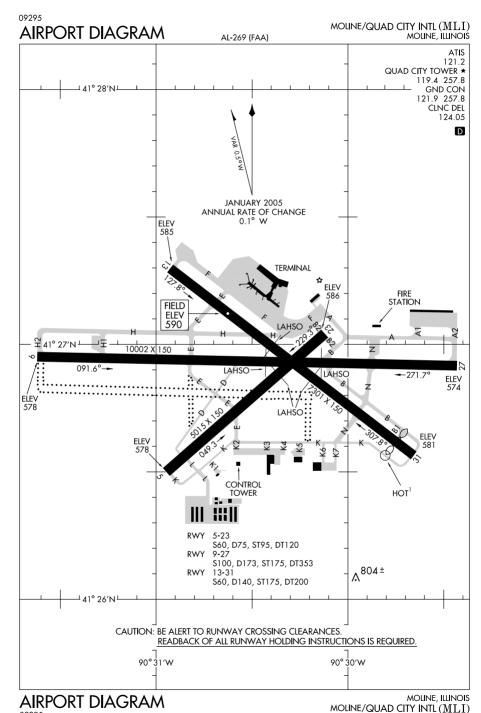
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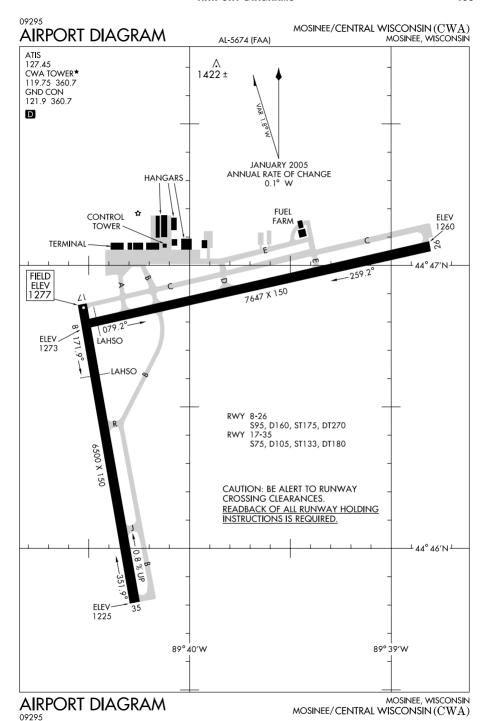


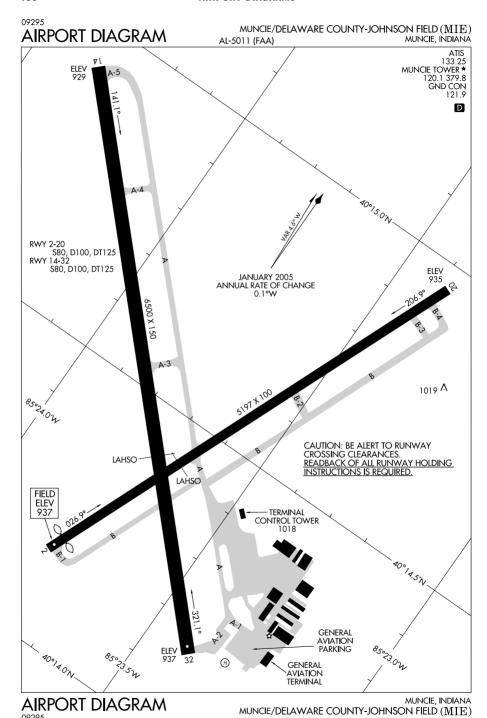


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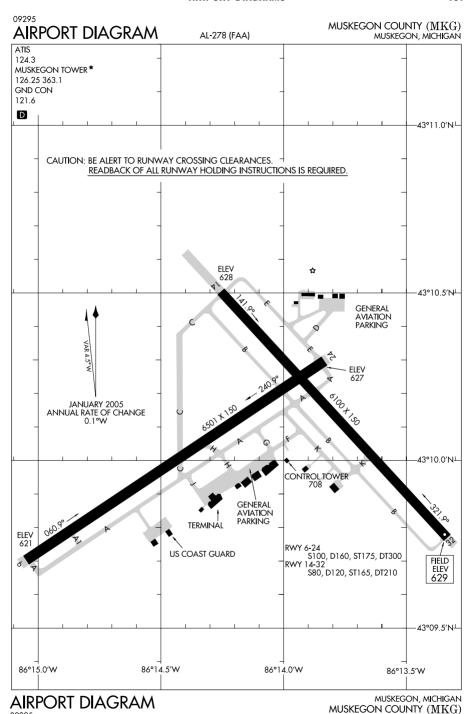
 $\begin{array}{c} \text{MILWAUKEE, WISCONSIN} \\ \text{MILWAUKEE/LAWRENCE J. TIMMERMAN}(\underline{MWC}) \end{array}$ 



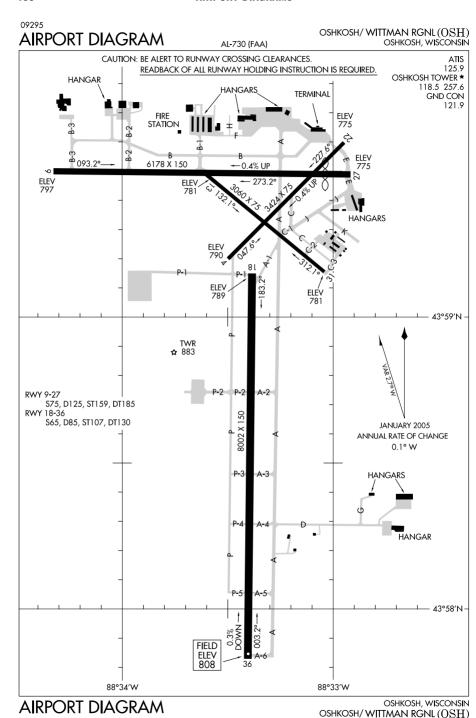




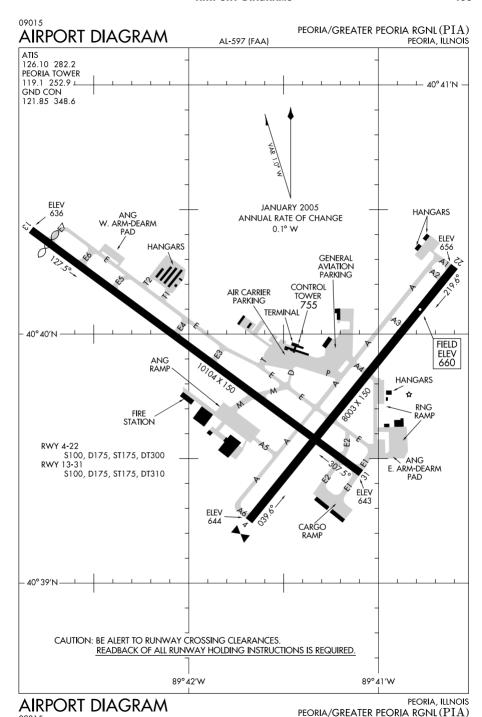
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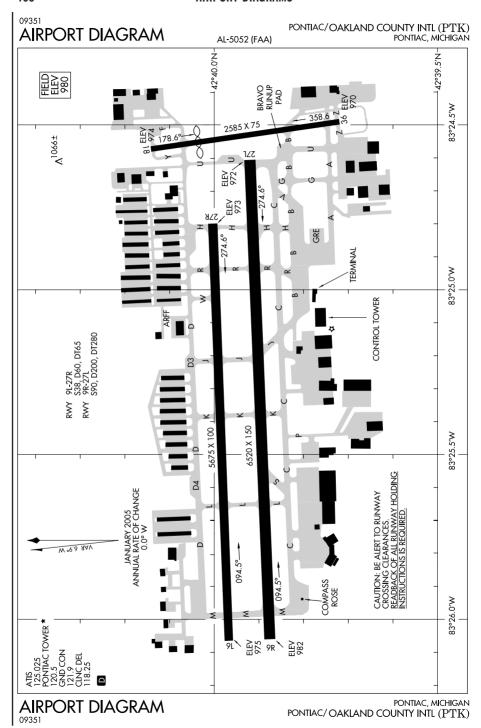


## EC, 17 DEC 2009 to 11 FEB 2010

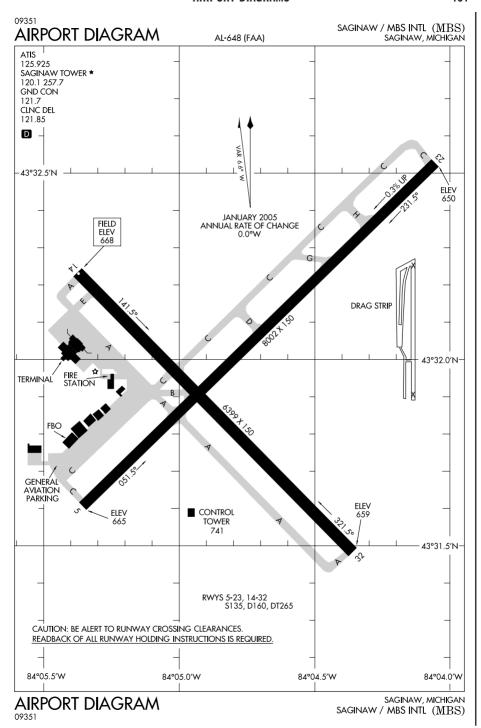


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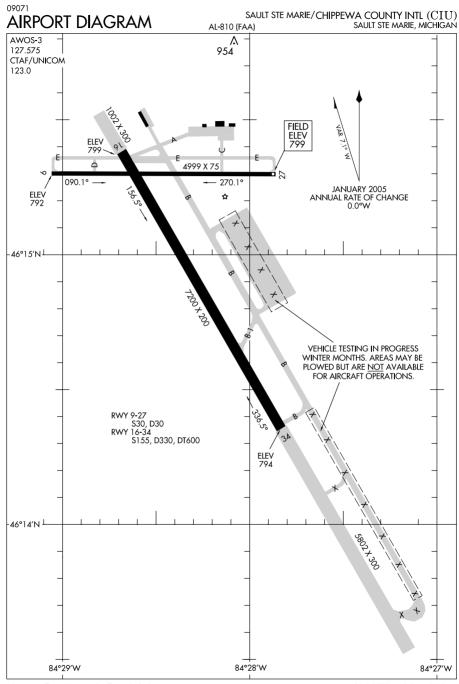
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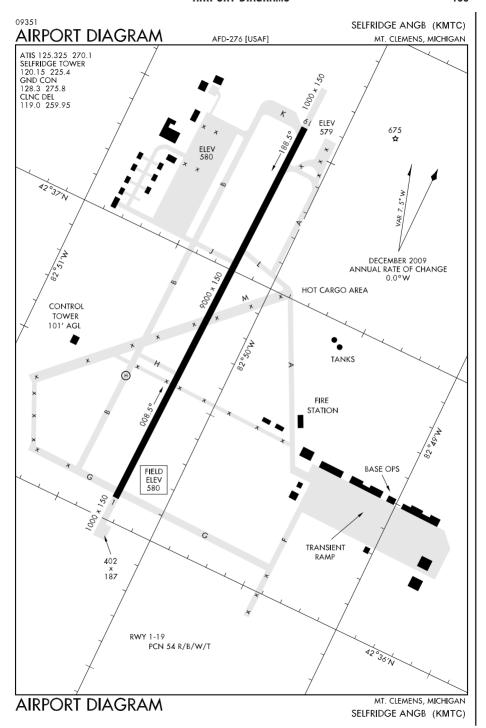
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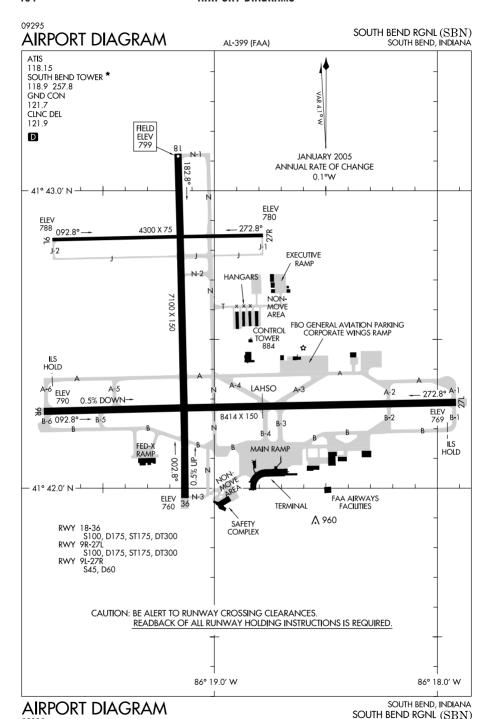
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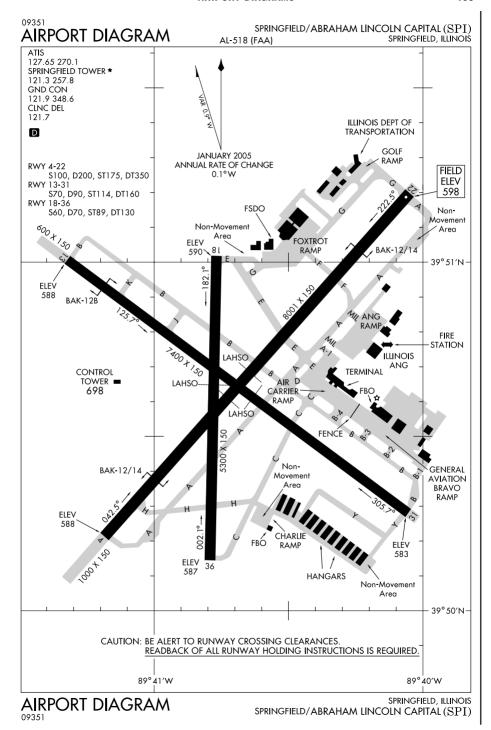


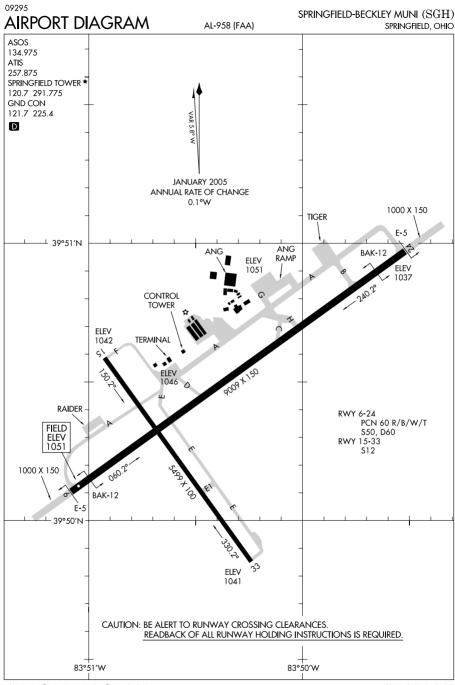
Sault ste marie, michigan sault ste marie/ Chippewa County Intl  $\left(CIU\right)$ 



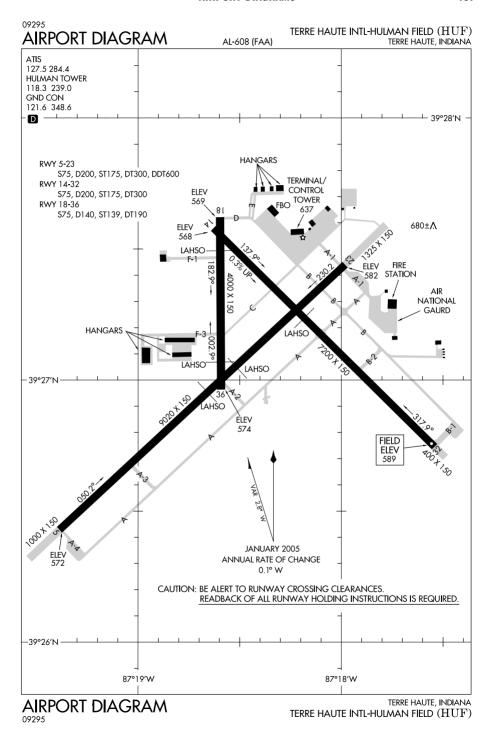
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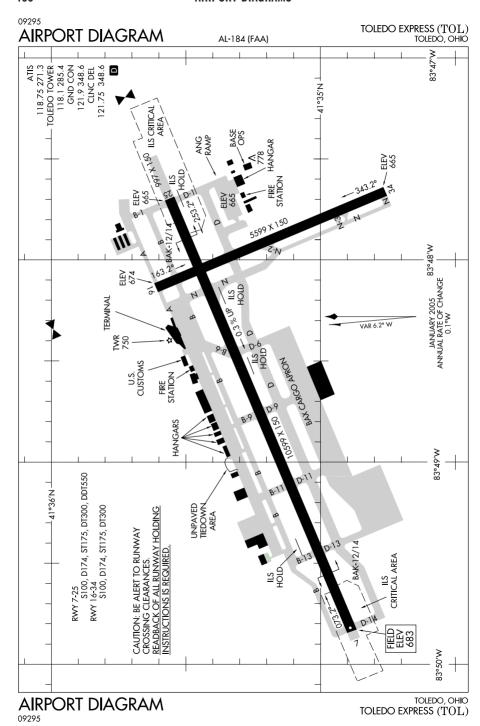




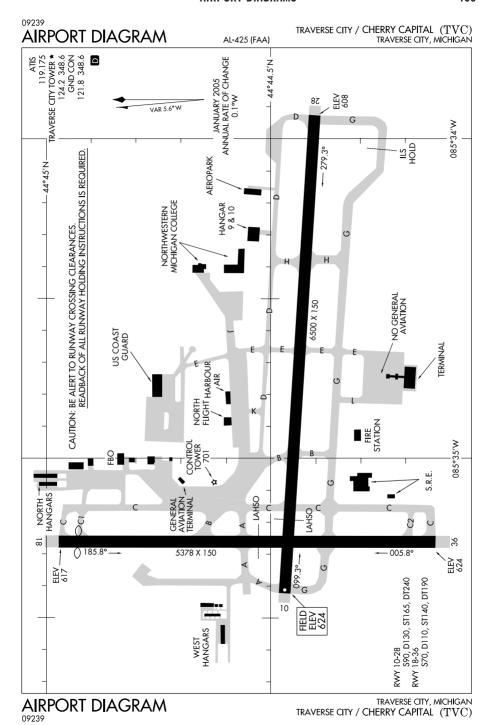


 $\begin{array}{c} \text{SPRINGFIELD, OHIO} \\ \text{SPRINGFIELD-BECKLEY MUNI } (SGH) \end{array}$ 

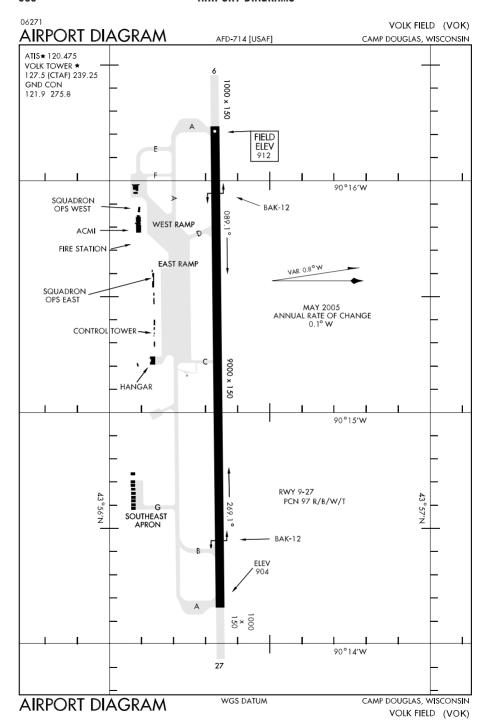




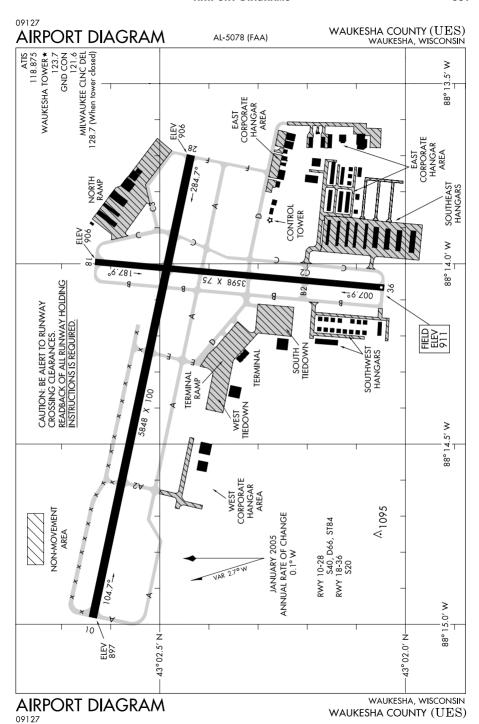
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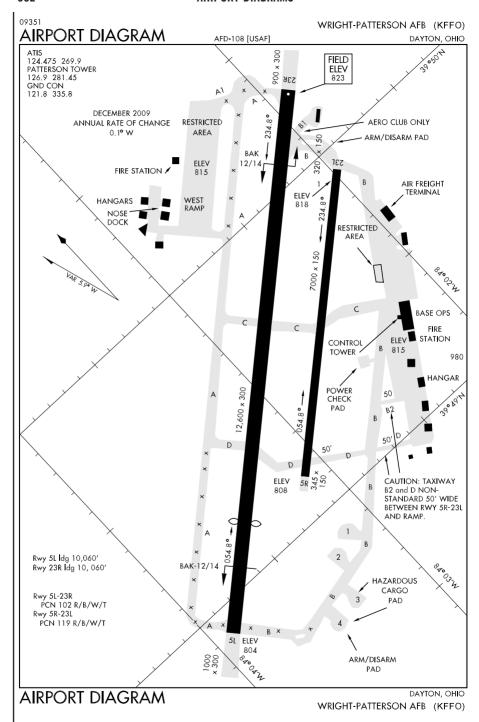
EC, 17 DEC 2009 to 11 FEB 2010



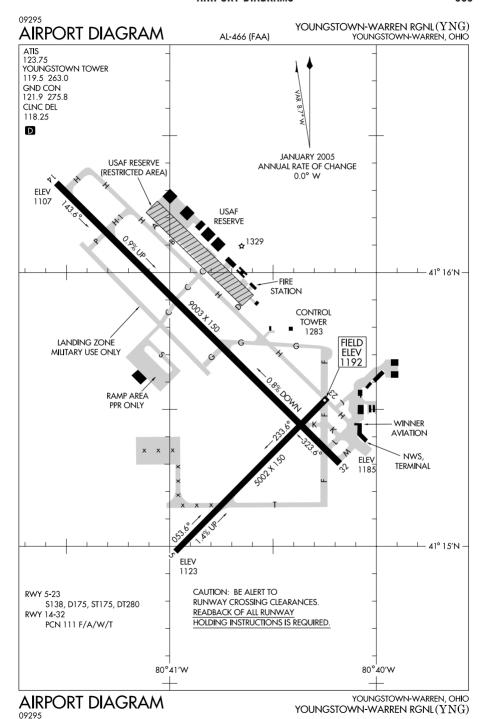
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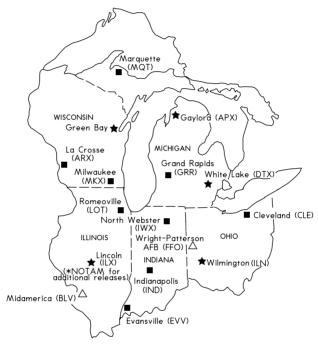
EC, 17 DEC 2009 to 11 FEB 2010



EC, 17 DEC 2009 to 11 FEB 2010



## NATIONAL WEATHER SERVICE (NWS) UPPER AIR OBSERVING STATION (UAOS) AND WEATHER RADAR NETWORK



## **LEGEND**

- △ AVIATION WEATHER SERVICE (MILITARY)
- ▲ AIR TRAFFIC CONTROL RADAR
- ★ UPPER AIR OBSERVING STATION HYDROGEN FILLED BALLOON RELEASES AROUND 1100 UTC AND 2300 UTC DAILY/RADAR
- RADAR ONLY
- UAOS-BALLOON RELEASES AROUND 1100 UTC AND 2300 UTC DAILY
- O OTHER NWS UPPER AIR STATIONS-BALLOON RELEASE TIMES ARE FLEXIBLE BUT GENERALLY AROUND SUNRISE AND/OR EARLY AFTERNOON

NOTE: FOR RELEASES LATER THAN 1130 UTC AND 2330 UTC, AND FOR SPECIAL RELEASES AT OTHER THAN THE SCHEDULED HOURS, AN AERONAUTICAL INFORMATION MESSAGE OR NOTAM\* WILL BE FILED.